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A MEDICAL HISTORY OF THE BRITISH
EXPEDITIONARY FORCE IN THE EAST

1854 - 1856

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Abstract.

This thesis is in two parts. Part 1 includes an account of the Victorian medical profession, an assessment of the state of medical knowledge in 1855-55 and a description of the various diseases which afflicted the soldiers of the expeditionary force during the campaign in the East. Part 2 comprises a medical history of the expeditionary force from the time of its departure from the United Kingdom in April-May 1854 until its return in June-July 1856. It includes an assessment of the ways in which the doctors responded to the many crises which arose viewed in the light of their understanding of disease processes and after taking account of the many constraints placed upon them by events over which they had no control.

It is apparent from the study that the doctors were handicapped by a system ill-suited to the needs of an army in the field. It is also apparent that they were overtaken by a series of naturally occurring events which they were powerless to influence. Contrary to popular belief it seems clear that they displayed an acceptable standard of professional competence and were compassionate in their treatment of the sick and wounded.

Preface

Few campaigns in British military history can have been studied more closely or written about in greater detail than the Crimean war. The report of the parliamentary select committee of 1855 alone extended to 2,139 pages and was quickly augmented by a variety of other reports on all aspects of life in the Crimea and in the British hospitals in Turkey. (1)

Moreover, the campaign was the last in recent times in which both combatants and observers were unfettered by censorship and it was not long before the official reports were enlarged upon by innumerable unofficial accounts of the difficulties which had arisen in the Crimea and in Turkey.

In the last one hundred and twenty years numerous secondary works have also been published which, for the sake of convenience, can be placed into the following categories;

The long and detailed histories of the campaign, of which Kinglake's Invasion of the Crimea must be accorded a special place in the bibliography. (2)

Shorter accounts, of which Vulliamy's Crimea (1939) is the most elegantly written, if not the most truthful, account.

Autobiographical accounts of particular officers, of which Calthorpe's Letters from Headquarters (1857) was the first and Higginson's 71 years a Guardsman (1916) was the last.

Biographical accounts of individual soldiers written around diaries, sketches and collections of letters, as exemplified by Fitzherbert's biographical sketch of Henry Clifford (1956) and the Marquess of Anglesey's account of Edward Cooper Hodge, Little Hodge, (1971).

Short accounts of the war in which the author makes use of particular manuscript collections in order to write about the experiences of some prominent person, as exemplified by Cecil Woodham Smith's Florence Nightingale (1950), Hibbert's Destruction of Lord Raglan (1961) and Thomas's biography of Lord Cardigan, Charge ! hurrah! hurrah! (1974)

Despite the great volume of literature which has accumulated on all aspects of the campaign in the last one hundred and twenty years, there have been few studies of the part played by the Army Medical Department in the treatment of the sick and wounded beyond a medical and surgical history, published in 1858 (3), a short account of the work of its Director General, Dr. Andrew Smith (4), and an equally short account of the difficulties which faced the department during the Crimean campaign in a longer account of the development of the army medical services over three hundred years (5).

But, if systematic studies of the medical aspects of the campaign have been few in number, there has been no lack of historical accounts of the campaign in which the medical department has been criticised for the breakdown in medical services during the autumn and winter of 1854. The process of denigration began with Chenery's dispatch from Scutari on 12 October 1854, was sustained by the Times during the remainder of the war and has continued up to the present day (6) Most writers attribute the failures to the incompetence and inflexibility of

Dr. Andrew Smith and his colleague, Dr. John Hall, Principal Medical Officer to the expeditionary force (7), a view which does not accord with Smith's standing either as a doctor or as a scientist sufficiently accomplished to have been elected to the Royal Society or with Hall's as a medical practitioner who had gained much experience in India of the diseases which afflicted the troops in Bulgaria and the Crimea. Nor for that matter does it accord with the fact that by the winter of 1854 both the French and the Russian medical services were also in the greatest difficulties. (8)

Moreover, most authors, whilst critical of Smith or Hall, choose to ignore the efforts of all the other medical officers who were employed with the army in the East (9), preferring to take the romantic view that Florence Nightingale saved the British army from destruction. Such a view ignores the realities of the medical problems in Scutari when, during the winter of 1854-55, many thousands of soldiers were sick although Miss Nightingale's party never exceeded forty in number. (10)

It seems then that writers who display clear understanding of the political complexities of the Eastern question and insight into the characters of the leading figures in the conflict have, when writing critically of Dr. Smith and his colleagues, failed to show, or have chosen not to show, any comprehension of the difficulties which beset them during the campaign in the East.

This thesis examines those difficulties and suggests reasons for the breakdown in the medical services to the expeditionary force during the autumn of 1854 and the winter of 1854-55. In arriving at its

conclusions use has been made of the papers of the 5th. Duke of Newcastle who, as Secretary of State for War, was ultimately responsible for the direction of the war; the papers of Lord Raglan, who, until his death in June 1855, was Commander-in-Chief of the expeditionary force; the official correspondence of Dr. Andrew Smith, Director General of the Army Medical Department; the official medical and surgical history compiled on Smith's instructions and published as a report to Parliament in 1858; the diaries and papers of Dr. John Hall, Principal Medical Officer to the expeditionary force; the letters of Dr. Cumming, Hospital Commissioner and later Principal Medical Officer in Scutari; and the papers of Florence Nightingale, who on being appointed head nurse to the expeditionary force by the Duke of Newcastle, arrived in Scutari on 5 November with her party of nurses to assist in the care of the sick and wounded soldiers accommodated in the Barrack Hospital.

Use has also made of the letters and diaries of a large number of officers, both military and medical, of less elevated status, which while providing little information about the higher direction of the war provided valuable insights into the thoughts and feelings of those unfortunate enough to be caught up in the conflict.

For the sake of convenience, the thesis has been written in two parts.

Part 1 includes an account of the Victorian medical profession and the state of medical knowledge in 1854-55; a description of the various diseases which afflicted the soldiers of the expeditionary force; an examination of the preparations made by the Director General of the Army Medical Department at the outbreak of the war; an assessment of

the relationship between the doctors of the Army Medical Department and the soldiers and politicians placed over them; an examination of the place of the medical department in the administrative framework of the army; and a comparison between the professional skills and social standing of the army doctors and the professional skills and social standing of officers belonging to other branches of the service.

Part 2 comprises a medical history of the expeditionary force from the time of its departure for the East in April-May 1854 until its return in June-July 1856. It includes an assessment of the response of the doctors to the many crises which arose viewed in the light of their understanding of disease processes and after taking account of the many constraints placed upon them by external events over which they had no control.

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PART ONE.

**THE ARMY MEDICAL DEPARTMENT AND
THE MILITARY MACHINE, MARCH 1854.**

It is not only in the sense of humanity but in that of a sound policy and real economy that the state should provide able medical and surgical advice for its soldiers when sick or wounded. I look upon it to be an implied part of the compact of the citizen with the state that whoever enters the service of his country to fight its battles, should be provided with the same type of medical aid which he enjoys as a citizen.

Sir James McGrigor
Director General, Army Medical Service, 1815-1850. (1)

1. Victorian medicine and the army medical department 1815-1851.

By the beginning of the 19th. Century the legally qualified medical practitioners residing in England and Wales were divided into three professional groups, the physicians, the surgeons and the apothecaries. The physicians, the smallest group, were, for the most part, graduates, educated in the classics at Oxford or Cambridge and subsequently admitted by examination to the Royal College of Physicians, the oldest of the medical foundations. Membership of the College was at two levels, the Fellows and the Licenciates. Both groups were bound exclusively to the practice of physic or internal medicine and were not permitted to dispense drugs or practice surgery. The College regulated the practice of medicine within a 7 mile radius of London, its power and influence being vested in the Fellows, of whom there were less than 600, and who had a monopoly of medical practice among the wealthy both in London and the Provinces. Once established as a physician, a medical practitioner could look to a prosperous future and some degree of social acceptance by the patients he treated. (2)

By contrast, separate from and generally regarded as inferior to the physicians were the larger group of surgeons, Members or Fellows of the Royal College of Surgeons, a foundation granted its Royal Charter in 1800, three hundred years after that granted to the Royal College of Physicians. Less often graduates, most surgeons obtained their medical qualification after several years attendance at lectures and demonstrations in the larger voluntary hospitals and after serving as surgical dressers to established hospital surgeons.

Separate from both physicians and surgeons were the apothecaries, a professional group given status by the Apothecaries Act of 1815 who, being concerned with the manufacture and sale of drugs prescribed by other practitioners, were thought of as little different from shop keepers.

Nonetheless, by the 1850's, save for the Fellows of the Royal College of Physicians, an elite body who had always striven to preserve a special status within the medical hierarchy, the divisions between the three groups were beginning to break down and most qualified practitioners were members of the Royal College of Surgeons and Licentiates of the Society of Apothecaries practising medicine and minor surgery much as their successors, the general practitioners, do in 1981.

By 1850 the system of apprenticeship as a method of training doctors was giving way to training obtained by attendance at a medical school, (3) and concurrent with improvements in education the foundations of scientific medicine were being laid by the work of such men as Joseph Jackson Lister who, by improving the construction of the

microscope, prepared the way for the new science of histology and ultimately for the discovery of the micro-organisms responsible for the infectious diseases; Marshall Hall who, by demonstrating the nature of reflex action, prepared the way for the development of modern neuro-anatomy and neuro-physiology; Justus von Liebig who, by applying his knowledge of chemistry to the problems of physiological measurement, established the practice of laboratory medicine and Claude Bernard, now regarded as the founder of experimental medicine.

And yet in spite of such developments, by the outbreak of the Crimean war the Victorian medical practitioner was still greatly limited in what he could do to help his patients by his lack of understanding of the disease processes. In the absence of that understanding his diagnoses were frequently incorrect and his treatments invariably symptomatic. Thus if called to treat a patient with, say, swollen ankles and an enlarged liver, a condition which he would have termed dropsy, he would have been unable to decide if the patient had a diseased heart or a diseased liver. If such a condition was a consequence of a diseased heart then he had an adequate treatment, digitalis, if a consequence of a diseased liver then he had no effective treatment to offer though he might well have still prescribed digitalis. Similarly, in his attempts to treat the infectious diseases he was handicapped by his lack of knowledge of the various micro-organisms which produced such diseases as cholera or typhoid fever and, lacking that knowledge, tended to confuse one infection with another. His confusion was increased if both diseases produced a common symptom such as fever; indeed, fever itself presented a particular diagnostic problem and was thought of as a disease entity rather than the

clinical manifestation of some underlying disease process.

No doubt as a consequence of the limited success which the Victorian medical practitioner had in treating his patients he was seldom held in high esteem by the public in general or by the influential minority in particular. Medical practitioners were, indeed, regarded as little different from servants, an attitude especially evident during the Crimean war and one which played a part in the difficulties which arose between Dr. Hall and the officers of Lord Raglan's staff.

Within the narrower compass of the Army Medical Department the period from the end of the Napoleonic wars to the outbreak of the Crimean war had been dominated by one man, Sir James McGrigor. After serving in the Peninsula as principal medical officer to the Duke of Wellington he was appointed at the age of 44 years and remained in office for 36 years. By no means an original thinker he was, nevertheless, an honest and competent administrator who strove to improve the standards of medical practice within his department by encouraging the scientific pursuits of those officers whose interests extended beyond military medicine, (6) by lending his support to the establishment of chairs of military hygiene at Edinburgh and Dublin, by introducing new methods of medical record keeping, (7) by encouraging those officers in the service who lacked qualifications to obtain medical degrees and by imposing stricter standards on those doctors aspiring to join his department, having drawn up new regulations governing the acceptance of new recruits as early as 1817. Candidates for the few openings in his department were required to bring letters of recommendation to

St.James' Place, headquarters of the army medical department and to furnish,

..certificates of regular study at established and eminent schools of twelve months duration in anatomy, medicine and chemistry and of at least six months duration in materia medica and botany...training in the practice of medicine and surgery at a hospital or infirmary should have been obtained, a knowledge of midwifery was expected and it was considered an advantage to have obtained experience in diseases of the eye. A liberal education was indispensable and the greater the attainment of the candidate in science, the more eligible he became for promotion.(8)

Candidates were required to sit an written examination and were questioned on various aspects of medicine and surgery by three senior officers. If accepted as assistant surgeons they were then sent to Fort Pitt at Chatham, the principal military hospital within the United Kingdom, a hospital which in McGrigor's view provided the young officer with

an opportunity of seeing diseases with their various shades from all parts of the world and by comparing them with the records in each case to see the causes of a fatal termination.(9)

An assistant surgeon could look for promotion to regimental surgeon after five years and on being so promoted could also purchase a commission within his regiment. After seven years service as a regimental surgeon a medical officer became eligible for promotion to the rank of staff surgeon 2nd.class a rank held for ten years before promotion to staff surgeon 1st.class. Two years later suitable candidates were selected for the posts of deputy inspector of hospitals and after a further five years a smaller number still achieved promotion to the rank of full inspector general, an appointment somewhat comparable to that of brigadier general. Since there were always more surgeons on the strength of the medical department than there were posts to fill it was usual for most

medical officers to have served for a period on half pay.

Despite the limited help which medical practitioners could offer their patients in 1850 the growth of the voluntary hospitals and the establishment of the medical schools had gradually brought about some improvement in the status of civilian medical practitioners but such developments had done little to improve the lot of the military surgeon who, despite a training longer and more expensive than his regimental colleagues, was still regarded as practising a demeaning craft and who was ranked after the officers of the commissariat, the regimental paymasters and the officers of the Department of Accounts in order of precedence. Moreover, he was denied mess privileges and required to find and pay for his horse and servant. Though ranking as lieutenant or captain he had in matters of discipline, "No claims to military command," (10) an anomaly which was to cause endless difficulties in the military hospitals in Scutari during the winter of 1854-55, whilst if he displayed courage on the field of battle he was denied the honours and rewards open to all other military personnel.

The adverse effect of such petty humiliations on the recruitment of men of ability had been commented on by McGrigor and by George Guthrie, former President of the Royal College of Surgeons and a leading military surgeon, in evidence to the Royal Commission on Pay and Promotion in the Services in 1840

..what has generally been complained of is that at the last coronation when the navy and army obtained promotion in all the higher ranks, the medical officers of the army were passed over..their exclusion is most mortifying to them as they feel that they had not less faithfully and zealously discharged their duties than their brother officers..(11)

Whilst McGrigor's evidence to the commission was tempered by a degree of discretion appropriate to a serving officer, Guthrie suffered from no such inhibitions

..the army surgeon is the most neglected officer in the service..I have seen a staff surgeon, in charge of many hundreds of wounded, brush his own shoes, clean his own horse, and then go and do many of the most delicate operations in surgery..the situation is most unjust for it is only to the surgeons of the army that promotions and honours or pensions are considered unnecessary and are absolutely refused..men of good administrative ability and best professional knowledge can only be obtained by adequate remuneration, rewards and honours..(12)

It was a measure of the gap in understanding between McGrigor and Guthrie and the senior officers sitting on the Royal commission that the latter saw no reason to change the anomalous position of the officers of the army medical department, reporting in their conclusions that

..the general impression produced by the evidence was that the conditions of the army medical officers were not unfavourable and that the improvements in pay and pensions since 1830 were well calculated to secure a succession of accomplished medical officers for the military service.. (13)

In December 1849 the subject of honours and decorations for army surgeons became a subject of a lengthy correspondence between the Duke of Wellington and Earl Grey, then Secretary of State for War. The duke explained that McGrigor had again raised the question of the eligibility of the surgeons to be admitted to the military branch of the order of the Bath. Lord Grey felt that they were ineligible because they were not exposed to danger on the field of battle or called upon to fight against the enemy, (14) a view not shared by Guthrie, himself a Peninsular veteran, who had pointed out to the Royal Commission ten years earlier that the practice of denying rewards to military medical men had arisen from the belief that as non-combatants

they were not exposed to danger and could therefore be classed with clergymen and other civilians attached to the army. It was Guthrie's belief that

..in every siege, medical men were sent into the gorge of the trenches, marched with the troops and were exposed to a great part of the dangers of the field, and afterwards, to those of their own profession, which crowded hospitals engendered, and which were often most fatal..(15)

The claims of the army surgeons for recognition were next taken up by Thomas Wakley, editor of the Lancet, who, in a leading article, drew attention to the deaths of numerous officers of the army medical department whilst on active service in Burma, China and India and pointed out that military surgeons on the Continent received every sort of military honour.(16) Eventually the justice of the surgeons' cause was conceded by the War Office and on 16 August 1850 McGrigor was admitted to the military branch of the Bath as a Knight Commander whilst seven of his colleagues were admitted as Companions.

McGrigor finally retired from office on 31 May 1851 at the age of 79 years. During his long service he had done much to advance the cause of military medicine but like his former master, the Duke of Wellington, had remained too long in office and had grown too old to be effective. Almost his final action was to recommend the appointment of his successor to the Military Secretary, Lord Fitzroy Somerset.

..before leaving office it is strongly my duty to make known to your Lordship the qualities of one of the ablest officers I have met with in the Department. His talents and high professional acquirements command the respect of the Body of Medical Officers of the Army, while withal he is a ready and acute man of business habits in whom, from my knowledge of his high principles and integrity, I could place the utmost confidence. (17)

The man in whom McGrigor placed such confidence was his deputy at St. James' Place, Dr. Andrew Smith, a medical officer of many years experience and a zoologist of sufficient distinction to have been elected to the Royal Society for his work on the fauna of South Africa. Smith came to office with a high reputation amongst his brother officers but was largely unknown outside medical circles. Unlike his predecessor it was his misfortune to be without friends in high places and it was yet another irony of the Crimean war that the letter from McGrigor recommending his appointment was addressed to Lord Fitzroy Somerset who, as Lord Raglan, was to command the army in the East three years later and was to display such little confidence in the army medical department.

2. Queen Victoria's army at the outbreak of war, March 1854.

But where was our materiel (sic) for this expedition? The utmost activity in the arsenals barely sufficed to provide guns. Clothing, stores, general equipment, all had to be ordered in desperate haste; regiment after regiment was hurried abroad ill-prepared for immediate service, and from the outset, distrustful of the authorities at home to whom they were entitled to look for support and due provision. (18)

The decision of Lord Aberdeen's administration, taken on 27 March 1854, to ally Britain with France and declare war on Russia in defence of Turkey was received with great enthusiasm by the public but found the army ill-prepared to fight a campaign three thousand miles from the United Kingdom. After forty years of peace the organization built up by the Duke of Wellington over eight years to serve his army on the Peninsula was no longer in existence. The parsimony of successive governments, the innate mistrust the British

had always felt for the military and the increasing conservatism of the duke in his later years had all played a part in reducing the efficiency of the standing army and failed to provide the impetus for reform. Furthermore, as was to be demonstrated repeatedly by the commissions of inquiry set up subsequently to investigate the reasons for the failures in the Crimea, the responsibility for the suffering of the common soldiers before Sebastopol lay less with those in authority over them than with a system, evolved over three centuries, to prevent the army from menacing civil liberty. A system which, if admirable as a check to the ambitions of unscrupulous generals, was one which rendered the rapid and efficient movement of troops and supplies a virtual impossibility.

In theory the armed forces were commanded by the Sovereign; in practice the political control of the army and navy was vested in the Secretary of State for War and the Colonies, a minister of cabinet rank responsible for the formulation of grand strategy. To assist in the routine matters of military administration the Minister for War had under him a junior minister, the Minister at War. Originally the Sovereign's personal secretary in matters connected with the army, the Minister at War had gradually become responsible for ensuring that the money voted by Parliament for the use of the armed forces was used for the purposes for which it had been allocated. Although not normally in the cabinet he retained the right of access to the Sovereign because his was the channel through which the Sovereign issued his orders to the troops of the Royal Household.

While political responsibility for the army was vested in the Secretary of State for War, professional control was shared between two serving officers, the Commander in Chief, responsible for the training and discipline of the cavalry and the infantry of the line, and the Master General of the Ordnance, political adviser to the cabinet on all military matters and officer commanding the artillery and engineers, the two corps of ordnance. The Master General was also responsible for the manufacture and supply of cannon to the army and navy, the manufacture of small arms and ammunition to the cavalry and infantry and for the ordnance survey of the United Kingdom.

If the organization of command at the highest level was complicated that at a lower level was almost non-existent since there was no permanent military formation larger than the regiment. Each regiment was commanded by a colonel who, since he purchased his command, could be regarded almost as the proprietor of a private concern, having authority over recruitment, discipline and training of the officers and men under his command. (19)

Those holding commissioned rank were, for the most part, drawn from the upper middle class, having similar family backgrounds and having had similar educational experiences. Unlike their counterparts on the continent they were not expected to display great professional competence but were expected to display those qualities thought essential in an English gentleman.

The qualities valued in an officer were the qualities valued by the country gentry; courage, physical toughness, a determination to stand up for one's rights, a touchy sense of honour. Almost the only skill highly regarded was horsemanship and that was taken for granted. The notion that an officer should be a professional soldier, qualified by technical as well as the traditional virtues of a gentleman was derided and looked down upon, except in the engineers and artillery, two corps only doubtfully fit for gentlemen to serve in. (20)

This view of the innate superiority of the English upper classes in matters of leadership was shared by many common soldiers and was well expressed by Rifleman Harris who, having seen service on the Peninsula, maintained that,

..the men like best to be officered by gentlemen, men whose education has rendered them more kind in manners than your coarse officer, sprung from obscure origins, whose style is brutal and overbearing. (21)

Though the Royal Military College had been founded as early as 1799 and offered free commissions to graduates the greater number of officers entering the cavalry and infantry did so by purchase and, once commissioned, secured promotion up to the rank of lieutenant colonel also by purchase. Since commissions were expensive and the incomes accruing from them extremely small it was necessary for officers to have private means in order to maintain the high standards of dress and to meet the high cost of living in even the least fashionable of regiments. Nonetheless, whilst the cost of holding a commission was high (22) the duties were unexacting, little more being expected of a young officer than his attendance at a daily parade, if not otherwise occupied with hunting or shooting or, in the case of the fashionable regiments, with the activities of London society.

In the event of the regiment being posted to an unhealthy or uninteresting part of the colonies then exchange by purchase to some other regiment could usually be arranged thereby ensuring that an officer's social life was unhindered by any requirement of duty.

Once commissioned little encouragement was given to officers to improve their professional and technical knowledge and few bothered to attend the senior branch of the Royal Military College. In its early years early years the College had provided excellent training in the duties of a staff officer but by the 1850's, had fallen on hard times. Thus in 1854 only two professors served on its staff, one of whom, John Narrien, a distinguished astronomer, was elderly and nearly blind. (23)

Furthermore, by the outbreak of the Crimean war little progress had been made in teaching the art of handling military formations of a size greater than the regiment and it was 1852 before the first divisional manoeuvres were held on Chobham common. On that occasion such was the chaos which ensued that little of practical value was achieved. Indeed it seemed that even the choice of Chobham as a ground for military manoeuvres had been made in error.

..the ground, though it offered ample space, was not inviting for the movements of cavalry and infantry. A clump of fir trees formed the only prominent mark in the landscape. There was no sign of water fit for drinking; wherefore after a second visit the following day, I reported officially that I considered the ground unsuitable for its intended purpose. I refer to this incident only because, for some unknown reason, the authorities decided to make the ground on which I had reported unfavourably, the site of what was afterwards called the camp at Chobham. (24)

Once the camp was in use the soldiers taking part in manoeuvres wore the same uniforms as they wore in London and were required to meet the cost of any damages to their clothing. They were drilled much as if on Horse Guards parade and were supplied with food and drink by outside contractors rather than by the commissariat. Little transport was available and without civilian help the camp could have scarcely been held at all whilst the standard of the military exercises carried out by the troops can be gauged by the account of a young Grenadier Guardsman who witnessed exercises carried out in the presence of a visiting Russian general.

General Ogaroff had been sent on a special mission to the manoeuvres. I was directed one day to attend him on a field day, the concluding event of which was to be the storming of the summit of the ridge. During the day the general's comments were far from complimentary, but when the crisis culminated and, with shouts and disordered ranks, the successful storming party reached its goal, the general and his staff greeted the accomplishment of the manoeuvre with laughter too loud to conceal their sense of its absurdity. (25)

By contrast with the leisurely and undemanding life of the officers the lives of the common soldiers were harsh and unrewarding. Recruitment to the ranks tended to be for lengthy periods, if not for life. Each enlisted man receiving seven shillings a week from which half was deducted for messing. Rations were provided for two meals only and usually consisted of one pound of bread and three quarters of a pound of meat. In the event of a third meal being provided then this was at the soldier's expense. Food was taken at 7.30 am. and 12.30 am., the meat being boiled in one of the two coppers provided in each barrack room. The amount spent by the

authorities on barrack accommodation was less than that spent on the prisons and living conditions were over-crowded and squalid, facilitating the spread of pulmonary tuberculosis, the incidence of which was five times higher than that found in the civilian population. (26)

Uniforms were both over-elaborate and yet, with the introduction of the amendment to Queen's Regulations in 1852 abolishing the practice of measuring individuals, ill-fitting. Regimental colonels were free to indulge in every possible variation of colour and embellishment and few gave thought to the problems which arose from the sheer impracticability of say, a shako with a crimson and white plume, a short royal blue jacket and tightly fitting crimson pantaloons, the whole decorated with an abundance of gold lace. (27)

Few facilities for rest and recreation were provided and the enlisted men, being generally unwelcome in the towns adjacent to the barracks, could do little other than drink alcohol of inferior quality provided by civilian contractors in the regimental canteens. (28)

Discipline was maintained by the harshest means and colonels were still permitted to flog their men, although by 1850 the maximum number of lashes which could be inflicted for crimes and misdemeanours had been reduced from two hundred to fifty. Whilst medical officers were, themselves, no longer required to brand deserters with the letter D they were not absolved from the responsibility of instructing senior N.C.O's in the appropriate technique.

The punishment of marking a deserter with the letter D is to be inflicted on the parade in the presence of the men, and under the personal superintendence of a medical officer. The operation is to be performed with an instrument recommended for the purpose, a pattern of which is lodged in the office of the Military Boards, and the punishment is to be inflicted in the Cavalry by the Trumpet-Major and in the Infantry by the Drum-Major or Bugle-Major, who are to be instructed by the Regimental Medical Officers how to apply the instrument properly but effectually, as well as the substance, whether ink or gunpowder, with which the mark is to be coloured. (29)

But, if conditions at home for the common soldier were bad, those in India and the Colonies, where the rates of mortality from infections were extremely high, were even worse. Thus in the tables of mortality the soldier posted to Bermuda stood some chance of returning to the United Kingdom but hardly any if posted to West Africa. (30)

In the matter of arms with which to fight the enemy, despite her predominant position in the industrial revolution, Britain's soldiers were not well equipped save in possessing one new small arm, the Minie rifle, which by 1854 was in production at the Royal Ordnance Factory, Enfield Lock. The rifle was an important advance on the 1842 pattern smooth bore percussion cap musket, firing a heavy conical bullet in excess of 500 yards.(31) It was to play a decisive part in the campaign and, perhaps of greater significance, signalled the arrival of the inexpensive, standardised, small arm which was to change the character of warfare irrevocably. In addition to the Minie rifle the infantry were issued with a 17 inch triangular bayonet and the cavalry troopers and the gunners a variety of swords and lances. Officer's swords varied somewhat in design depending upon the the arm of the service to which they belonged but the choice of small arm was largely a matter of personal preference.(32)

The introduction of rifled small arms rendered the gunners vulnerable to attack from enemy skirmishers and the field artillery, the principal weapon of offence during the Napoleonic campaigns, was pushed into a supporting role until the problem of producing a rifled, breech loading field piece had been solved. The solution to the problem was not forthcoming by the time the expeditionary force landed in the Crimea and the use of rifled ordnance in the siege of Sebastopol was limited to a few 68 pounder, 8 inch cast iron guns, made oval and twisted in the bore according to the Lancaster method. The guns so produced, Lancaster guns, were both inaccurate and unreliable, having the unfortunate tendency to blow up after firing a few rounds. In consequence the main ordnance used by the Siege train in the bombardment of the city comprised 8 inch smooth bore cast iron guns, smooth bore 24 pounders and 5 and 10 inch mortars.

The tactics soon to be used in the Crimea owed much to the memory of the Peninsula. Thus, after landing in Calamita Bay the five infantry divisions and one cavalry division marched through the Russian steppe lands in column of route, protected from any attack by the Russian cavalry by a screen of skirmishers. On arrival at the river Alma, the columns deployed into line, a difficult manoeuvre, and marched upwards to the Great Redoubt in two lines, firing on the commands of their officers.

Colonel Hood then proceeded to align the companies as carefully as the shelter of the bank would allow; the line being complete and under control, he then gave the order to advance, which was passed rapidly by each captain. As we reached the summit of the bank we came under a withering fire which would have been sufficient to arrest the progress of men long familiar with the sound of shot,

shell and musketry. The Russians had formed a line in advance of their breast work and were thus able to resist our advance with vigour; but after a volley from the front rank, our Grenadiers began their slow and steady advance, the rear rank firing while the front rank reloaded. Before long the advance line of the enemy began to fall back, a movement which encouraged us to press forward as rapidly as we could without losing formation. Our line advanced with firm and impressive regularity until it came within fifty yards of the breast work. The word "Charge" rang out, the line broke into a run and, bounding over the parapet, our Grenadiers flung themselves on the few Russian remaining inside. Our ranks were re-formed under the stern orders of our colonel, and in a few minutes we stood again in column.(33)

Despite the success of the infantry at the river Alma, once the siege of Sebastopol had commenced, the repeated failures of the British at the Redan was to demonstrate the futility of sending unsupported troops against heavily defended positions.

The destruction of the Light Brigade on the plain of Balaclava a month later was also to demonstrate the vulnerability of mounted troops when deployed against field ordnance and signalled the end of the the mounted arm as the shock troops of the battlefield.

The general chosen to command the British army was Fitzroy Somerset, a younger son of the Duke of Beaufort. Born in 1778 and created Baron Raglan shortly before the outbreak of the war in the East, Raglan entered the army in 1804 and served as an aide-de-camp to the Duke of Wellington before being wounded in the arm near the farm of La Haie Sante during the battle of Waterloo. Such was the serious nature of his injuries that his arm was amputated later the same day. On the return to peace he served as military secretary at Horse Guards for twenty five years and was then

appointed master general of the ordnance on the death of the Duke of Wellington. An able and conscientious administrator, personally indifferent to danger and discomfort, he seemed to lack those qualities of ruthlessness and single mindedness which characterize the great commanders in the field. Moreover, he was not well served by his subordinate generals, most of whom were Peninsular veterans but none of whom had the qualities of Picton or Craufurd.(34)

3. The difficulties which faced Dr. Andrew Smith in March 1854.

If the Director-General of the Army Medical Department wished to furnish to our hospital in the East some kinds of supplies as, for instance, wine or arrowroot, he had to send his purpose revolving in an orrery of official bodies; for first he must move the Horse Guards, and the Horse Guards must move the Ordnance, and the Ordnance must set going the Admiralty, and the Admiralty must give orders to the Victualling Office, and the Victualling Office must concert measures with the Transport Office, and the Transport Office, having only three transports, must appeal to the private ship owners in the hope that sooner or later they would furnish the sea-carriage needed.(35)

The declaration of war found the Army Medical Department as ill-prepared for active service abroad as any of the other branches of the service. Indeed, despite Sir James McGrigor having conscientiously filed every letter and document which had been sent to him in 37 years Dr. Smith found little in the archives at St. James's Place which might have assisted him in drawing up an establishment of medical officers and nursing personnel or in listing the equipment necessary to establish a medical service for the expeditionary force. Smith with that disarming candour which characterised most of his writing described his difficulties later when writing the preface to the medical history of the campaign in the East.

When it was determined that a military force should leave this country and proceed to the Mediterranean, to aid the Turks in resisting the advance of a Russian army then threatening Bulgaria, I was required immediately to provide an adequate medical staff, and the amount of stores likely to be wanted for hospital purposes. If I had been given to understand when I received this intimation that the troops were to be employed on duties which are usually exacted of soldiers in times of peace, I should have had no difficulty in deciding what I ought to furnish, but having been on the contrary, led to expect that they would probably soon be engaged in the field caused me much consideration and anxiety as neither myself nor any of the officers of the Department had, from personal experience, a knowledge of all that probably be found necessary for the wants of the sick and wounded during a European war.(36)

When, on 10 February 1854, Smith received notice that an army of 10,000 was shortly to be sent to Malta it was also made plain to him that there was every likelihood of its travelling from Malta to Turkey in order to reinforce the Turkish army in and around Constantinople. He immediately sought permission to send three senior medical officers and three engineers, the latter to act as sanitary experts, to various parts of Turkey in order to find out as much as possible about the diseases endemic to the country. Permission to send the doctors was given but that for the engineers to accompany them withheld. Accepting the rebuff philosophically, he selected three experienced officers, Drs. Dumbreck, Mitchell and Linton, and instructed them to leave with all dispatch; Dumbreck to Turkey via Vienna, where he was to seek the guidance of Dr. Sigmund, an expert on the diseases of Turkey and Bulgaria; Mitchell to Gallipoli and Constantinople; and Linton to the Balkans and that part of Bulgaria bordering on the Black Sea.

He next turned his attention to the numerous problems associated with the organization of that section of the medical department which was

to accompany the expeditionary force. He had first to choose a medical officer of sufficient seniority to take charge of the service, and then decide upon the appropriate number of medical officers to accompany him. It was also necessary for him to requisition sufficient hospital equipment to serve the needs of 10,000 men, to recruit attendants and orderlies, and to procure suitable vehicles in which to carry the sick and wounded when in the field.

Smith's first choice as Principal Medical Officer was the doctor already occupying the post in Malta, Staff Surgeon 1st class Burrell, who was immediately promoted to Deputy Inspector General but when, in the succeeding weeks, the size of the expeditionary force was increased to 30,000, it was necessary for Smith to select an officer of greater seniority. Burrell accepted his supercession with ill-grace and promptly resigned despite being offered a more lucrative post in India. His successor, Deputy Inspector General John Hall, then serving in India, was instructed to make his way to Constantinople with all speed. (37)

Prior to February 1854 each regiment had been assigned a regimental surgeon, chosen first by the commanding officer and approved subsequently by Smith, and an assistant surgeon. With the departure of the army for the East the regimental medical establishment was increased by a second assistant surgeon while the scale of provision of staff medical officers employed in the military hospitals was settled at one Deputy Inspector General, three Staff Surgeons

1st.Class, appointed to supervise the three divisions of the hospital, three Staff Surgeons 2nd.Class, six Assistant Surgeons, one Assistant Surgeon in charge of medical stores and one purveyor. On learning of the increase in the size of the expeditionary force it was then necessary for Smith to increase the numbers of medical officers to one Inspector General, four Deputy Inspectors General, 12 Staff Surgeons 1st.Class, 12 Surgeons 2nd.Class and 70 Assistant Surgeons which together with the regimental surgeons gave a total of 174 medical officers and a ratio of one doctor to every 144 men.(38)

Smith had no control over the appointment of the subordinate ranks within the hospital, the choice of wardmasters, cooks, and stewards lying with the military commandant of the hospital whilst the choice of men for duty as orderlies and ambulance attendants lay with the colonels of regiments. The practice of detailing enlisted men to act as medical attendants in times of emergency had long presented a problem to the medical service since hospitals were places where diseases were as likely to be caught as cured and men pressed unwillingly into service rarely worked well or displayed those characteristics of behaviour desirable in persons tending the sick. Moreover, few colonels were willing to release able-bodied men for duties in the regimental or general hospitals and were more likely to send the sickly, the unintelligent, the illiterate and the disaffected, a phenomenon observed by a medical officer on Grenada as early as 1794.

Had they a man amongst them whom they were tired of flogging and who could neither be induced to die or desert, he was the elect of the hospital corps; or at best he might be a simpleton, not fit stand sentry in a position of trust, or so awkward in the ranks that he could not be trusted with a ball cartridge. (39)

Smith now wrote to the Military Secretary at Horse Guards to urge the formation of an hospital corps.

During the Peninsular war drummers and bandsmen were employed in removing the wounded, but the number of those which were available were never equal to the demands which arose for their aid. The knowledge of this fact raises at once a case for present consideration and shows that some assistance beyond what has hitherto been granted should be henceforward liberally provided.

This assistance may be variously supplied but feeling as I do, that it will never be willingly conceded in the shape of able-bodied soldiers, I at once propose that a hospital corps should be raised immediately the army reaches Turkey, and that it shall consist of at least 800 native Armenians and should be under regular military discipline. On this subject I have had conversation with Dr. Brett, a retired surgeon of the company's service, who lately resided in Constantinople, and he appears confident that the above number of respectable and able-bodied men may be readily obtained.. I therefore recommend that Dr. Brett, who understands the several languages spoken in Turkey, should be engaged and required to proceed at once to Constantinople to obtain such information as will enable the General Commanding-in-Chief, aided by the advice of the Inspector General of Hospitals, to decide what will be the best course to follow in order to form a corps. (40)

Smith was given permission to send Brett to Constantinople but since the War Office omitted to tell the military authorities in Turkey of his arrival he was obstructed at every turn, the view being that native bearers would be useless on the field of battle and would run away the moment the first shots were fired. Brett eventually abandoned his efforts to help and returned to England but Smith, undeterred by this failure, continued to press the need for ambulance attendants and hospital orderlies. Eventually the War Office took the steps necessary to form a corps of ambulance attendants, not as Smith had

wished from young able-bodied men, but from pensioners who were independant of the medical department being under the command of Colonel Alexander Tulloch, an arrangement of which Smith disapproved.

I was five years at Chatham and I knew of no man, however he may look, in point of fact after three or four years on the pension list, can have anything in him to enable him to do the duty. I opposed it to the very last, as far as I could, but I was over-ruled. (41)

In the event, much as Smith had predicted, the pensioners proved of little use, being sickly, drunken and generally too feeble to carry out the duties to which they were assigned.

Within a short time of being told about the departure of the expeditionary force Smith was asked by the Military Secretary to supply details of his plans for the transportation of the sick and wounded once in the field, a problem which had beset military surgeons for centuries. Their removal from the field of battle in specialised vehicles had been pioneered by Napoleon's surgeon, Baron Larrey, as early as 1792 but such vehicles had not been introduced into the British army because of the opposition of the Duke of Wellington.(42) Thus in 1854, at a time when the French medical services had an abundance of light, sprung vehicles developed as flying ambulances, the British medical services were without vehicles of any description and the Director General was required to submit, in haste, plans for a suitable vehicle. Smith complied within a week, forwarding sketches of a two wheel cart, after a design by Guthrie, President of the Royal College of Surgeons, to be drawn by two horses, and a four wheel cart to be drawn by six mules. His plans were accepted by the War Office

but great delay was then occasioned by the insistence of the Ordnance Department that they be fitted with standard gun carriage wheels, a modification which rendered them so heavy as to be useless once winter arrived in the Crimea. Smith's plans for the transport of the sick and wounded received an even greater setback in that only twelve ambulances were completed in time for the landing in the Crimea and these, on the orders of the port naval officer, were unloaded at Varna rather than in Calamita Bay. (43)

As Director General of the army medical department Smith was also responsible for dispatching sufficient medicines, medical comforts and surgical appliances to meet all eventualities. Since the task of ordering medicines was his alone, the necessary instructions were sent to the Apothecaries Hall within a week. Obtaining equipment for the hospitals soon to be established in Turkey presented him with greater difficulty. As the scale of equipment for a general hospital in the field was not known he estimated a potential need for 5000 beds together with the appropriate quantity of medical and surgical equipment. (44) The necessary requisitions were dispatched to the purveyor's department without delay, but in the forty years which had elapsed since Waterloo the efficiency of the department had declined. Thus long delays resulted as the few veterans still employed struggled to carry out the many different tasks with which they were suddenly presented. In an effort to facilitate the requisitions of the medical department a Peninsular veteran, Mr. Wreford, was called out of retirement and attached to headquarters at St. James's Place. Despite his efforts, however, the delays which took place in dispatching medical

equipment to Constantinople continued to cause endless difficulties for the Principal Medical Officer to the expeditionary force, as instanced by the steamship Melita, loaded in early March with all the equipment necessary to fit out a 550 bedded hospital and then held up in port for two months before setting out for Turkey on 11 April. (45)

Smith also anticipated the problems which would arise in transporting the sick and wounded by sea from the field of battle to the base hospitals and wrote to the Military Secretary on 11 May asking that

A liberal supply of ships, commodious steamers, high between decks with ample means of ventilation and fitted with fixed berths be made available. (46)

Such ships would also have been of use in carrying convalescents back to the United Kingdom and could have been utilised, had the need arisen, as extra hospital accommodation. Unfortunately for the soldiers soon to land in the Crimea those in authority chose to ignore Smith's advice until compelled to reconsider the matter by the outcry which followed the publication of Chenery's dispatches in October exposing the suffering of the troops arriving in Scutari from the Crimea.

By the middle of April Smith had received the first report from Dumbreck written after a visit to Vienna and to the Danube basin. It contained little which could have brought him comfort.

Dumbreck reported that intermittent fevers (Tertian and Quartan Malaria) and dysentery were the most prevalent maladies and that there was little prospect of eradicating them until the vast areas of marshland which made up the Danube basin were drained. He

advised that soldiers landing in the region be given quinine as a prophylactic against malaria and that fatigue parties be employed in draining and cleaning up any area chosen as a camp site. He warned against drinking the water unless filtered through alum and advised against establishing camps in any of the low lying valleys which ran through the region.(47)

Smith lost no time in conveying the contents of Dumbreck's report to the Military Secretary and warned that soldiers landing in Turkey and the Danubian Principalities would be likely to suffer a deterioration in health. Concerned about the effects of the extremes of climate which were a feature of the region he asked that the soldiers' uniforms be adapted to the climatic changes. For the summer months he recommended a light, loosely fitting smock in place of the tight fitting red tunic, a light hat in place of the shakos, busbys and bearskin caps worn by the different regiments and asked that the use of the leather stock, worn as a means of keeping the soldiers' heads erect when on parade, be discontinued. For the winter months he also recommended that the men be issued with extra clothing and bedding at no extra cost to themselves.(48)

By the time the siege of Sebastopol had been in progress for a few weeks the conditions under which the soldiers were living and fighting were such that any concern about the smartness of military uniforms had given way to the baser concerns of keeping warm and avoiding frostbite, but in May 1854, when the troops were still embarking for the East it was perhaps inevitable that such suggestions should have fallen on stony ground. Thus Smith was left in no doubt by the Military Secretary that his advice was unwelcome.

Lord Hardinge is fully sensible of the advantage which it would be to the soldier if he could be provided with clothing adapted to meet both extremes of heat and cold, but he desires me to observe that this advantage could only be obtained, particularly in a climate where the days are intensely hot and the nights cold, by giving him two dresses and it would be impossible that he himself could carry this extra weight, with the addition of a greatcoat and blanket, nor could such an addition be admitted to the wheeled carriages or other means of transport accompanying the army as would be required for the conveyance of this extra clothing for the troops...

As to wearing the leather stock, Lord Hardinge quite concurs that the leather stock is objectionable and ought to be changed but to make any general changes in the clothing of the army at 3,000 miles at the very moment of entering a campaign is obviously impracticable.(49)

4. The diseases afflicting the expeditionary force during the years 1854-1856.

Whereas much information on the health of the army in the East is contained in the medical and surgical history written in 1858 (50) the greater part of that information is only of limited value to the medical historian in that it was drawn up by medical practitioners who had little understanding of the diseases they were attempting to describe. Moreover, given the conditions under which the troops were living and fighting, it seems probable that many of the sick suffered from more than one disorder at a time. Nevertheless, by using the history of 1858 as a source of information, albeit a crude and often inaccurate source, it is possible to draw certain conclusions about the nature of the diseases which afflicted the troops and to identify certain diseases, notably cholera, malaria, typhoid fever and typhus, all of which were especially destructive in their effect on the British army both in Bulgaria and on the heights before Sebastopol.

Cholera. An infectious illness, endemic to the Indian sub-continent, the disease results from the ingestion of a micro-organism, the *Vibrio Cholerae*. In its classical form the subject suffers from violent purging and vomiting and succumbs within hours from extreme dehydration but in its atypical form the subject may suffer little more than a looseness of the bowels associated with some abdominal discomfort. The disease may also be carried by persons who appear to be in normal health. It exists in both endemic and epidemic forms and is transmitted from person to person through food and drink contaminated with the vibrio.

Although the disease had been known in India and China for centuries it did not appear in Europe until 1817 but during the course of the next eighty years it then swept the continent on no less than six occasions killing countless numbers. (51) During the 3rd. pandemic the disease reached Great Britain in 1853, the first case being recorded in Southampton in July. By October it had reached London causing at least 600 deaths. It returned to the capital in the following August where in one parish alone 120 persons were stricken in the course of a single night. (52)

In its classical form it presented few difficulties in diagnosis to the doctors of the expeditionary force, many of whom had seen its effects when serving in India and Burma.

The usual symptoms, on first admission, were very slight cramps and pain in the bowels; a state of very great collapse (many persons having fallen on their way from the latrines); vomiting and purging, the evacuations being perfectly "rice water", as were also, (immediately after admission) the ejecta from the stomach. The pulse at the wrist was soon imperceptible and the cutaneous exudations most profuse; The hands were shrivelled and contracted, and the eyes sunk; the countenance cadaverous and livid. In nearly all the fatal cases, the sickness, which at first was most distressing, ceased after about two hours, coma supervened and the patients gradually sank, some remaining alive many hours after all chance of recovery had vanished. (53)

In its modified form, when presenting as a mild disturbance of the gastro-intestinal tract, it was indistinguishable from all the other bowel disturbances which made life unpleasant for armies landing on foreign soil and lacking any understanding of its mode of transmission the allied doctors were at a great disadvantage when attempting to control its spread. Although by 1854 at least one medical practitioner, John Snow, had appreciated that its spread was linked in some way to impure drinking water, (54) it was to be another thirty years before the vibrio was finally indentified.(55) In the meantime the notion of spread by miasma was still widely accepted and efforts at prevention were directed towards the removal of decaying organic material thought to be giving off harmful vapours and the avoidance of camp sites thought to be unhealthy by reason of being situated in low lying areas. Potential victims were also advised to avoid fruit and alcohol and counselled to wear broad pieces of flannel around their waists as a prophylactic.(56)

At Alladyn, where cholera first appeared in the 1st.Division, it was recommended that the latrine should be covered to a depth of two inches of soil morning and evening, and that manure from the horses should be swept into pits and covered daily; further the introduction of fruit into the camp was strictly prohibited. On the first appearance of sickness at the end of the first week in July, Staff Surgeon Cooper was appointed sanitary officer of the division with the view of keeping the camp in as good a condition as possible. There were no parades or fatigues likely to injure the health of the men, nor were they exposed to solar influence, but on the contrary every possible care was taken of them. (57)

If the doctors of the expeditionary force were handicapped in their efforts to control the spread of the disease they were in even greater difficulties in their efforts to treat its symptoms since they had no understanding of the biochemical changes which followed once the organism was established in the gastro-intestinal tract. (58)

The treatment of this disease during the second epidemic (1855) was even more unsuccessful than in the former and we shall scarcely be wrong in adopting the words of Surgeon Marlow of the 28th. Regiment who reports that every well marked case of cholera almost invariably proved fatal, uninfluenced apparently by any mode of treatment whatsoever. (59) (See also Appendix 3)

Fever. As a common accompaniment to almost all the infections fever presented as many difficulties to the medical staff as did cholera. It was perceived as a disease rather than as a sign of a disease and was accorded a special section in the medical history of 1858 where it was discussed in its various forms, intermittant, remittant, continuous and relapsing and in which space was devoted to a discussion of its supposed causes. (60) In all probability the most likely causes of the fevers which plagued the expeditionary force for the greater part of its time in the East were three separate disorders, Malaria, Typhoid or Enteric Fever and Typhus.

Malaria. A disease of tropical and sub-tropical regions occurring whenever human hosts and a sufficient number of malarial transmitting mosquitoes exist under such conditions of temperature and humidity that the malarial parasite is able to complete its complicated life cycle. Four species of the parasite are pathogenic to man, Plasmodium Falciparum, tending to produce a continuous fever, Plasmodium Ovale and Plasmodium Vivax, tending to produce a fever on alternate days, (Tertian fever) and Plasmodium Malariae, tending to produce fever on every 3rd. or 4th. day. (Quartan Fever) Of the four strains of parasite producing the disease in man, Plasmodium Falciparum is associated with most complications and with the highest mortality. (61) (See also Appendix 2)

The signs and symptoms of malaria usually develop after an incubation period of one to two weeks and prominent among its symptoms are high fever, headache and vomiting. Inasmuch as Bulgaria and the Danube basin are among the most malarious regions in the western hemisphere it seems probable that many of the soldiers who developed fever within a few days of landing in Varna had contracted the disease.

The general symptoms of the fever of this type were, quick and small pulse, giddiness and headache, great prostration of strength. Sometimes after three or four days nervous symptoms made their appearance, strongly resembling Delirium Tremens. Remissions generally took place at 4 am. or towards evening, but were often not well defined. Crisis was marked by copious perspiration; convalescence was often tedious. (62)

In that the staff of the army medical department made liberal use of Quinine it seems likely that the course of the disease would have been influenced favourably in many cases. It is also likely that on some occasions it would have been influenced adversely since Quinine may precipitate the dangerous complication of renal failure (Blackwater fever) in patients suffering from an infection of *Plasmodium Falciparum*.

Typhoid or Enteric Fever. An infection resulting from the ingestion of food or drink contaminated with the micro-organism *Salmonella Typhi*, a bacterium tending to flourish whenever normal sanitary measures are not observed as was the case during the early phase of the landings both in Bulgaria and in the Crimea. Symptomless carriers being particularly important in its spread. In its classical form ingestion of the organism results in the development of a septicaemia and a fever which climbs daily in a series of steps

producing increasing prostration and confusion. The patient so affected may die from toxæmia or may succumb to one of the many complications of the disease which develop in the second and third weeks, complications well documented in the medical history of 1858.

Private James Jones enlisted in January 1855, arrived in the Crimea 20th. August 1855, and was admitted into hospital November 13th. 1855. When admitted he complained of pain in all his limbs, his face was flushed, skin hot; pulse frequent; he had no appetite and complained of great thirst. He recovered in a few days from pains in the limbs, but his pulse became more frequent and very feeble. There was considerable delirium and great restlessness, particularly at night. At this time his bowels were regular and he did not complain of pain in the abdomen. Three days before his death, however, he was seized with a slight mucous diarrhoea, the weakness increased until the morning of the 23rd. when his stomach became very irritable. The vomiting continued all day, the patient growing weaker and weaker until he died.

Examination 14 hours after death. The body seemed emaciated, the abdomen was distended; the intestines were found to be slightly agglutinated by masses of semi-organised lymph; the peritoneum was inflamed and vascular, but there was no great amount of fluid in the cavity; the upper part of the small intestine was healthy, but about a foot and a half from the ileo-caecal valve the gut became vascular, and after a careful examination, two small perforating ulcers were discovered. In both cases the ulceration seemed to have commenced in Peyer's gland. The mesenteric glands, particularly near the ulcers, were much enlarged. (63)

Typhus. A disease resulting from infection with the micro-organism *Rickettsia prowazekii* and transmitted by the body louse, the disease produces a high continuous fever, a macular rash, nervous irritability and profound prostration. Occurring in epidemic form whenever large numbers of persons are crowded together under insanitary conditions it tends to develop in cold and temperate climates rather than under conditions of high temperature and humidity. It seems probable that large numbers of allied soldiers fell victim to it during the winters of 1854-55 and 1855-56.

PART TWO

THE HISTORY OF THE BRITISH EXPEDITION TO THE
EAST, WITH PARTICULAR REFERENCE TO THE MEDICAL
AND SURGICAL PROBLEMS WHICH BESET THE ARMY
MEDICAL DEPARTMENT.

A general map of the Crimean War (1854-1855). The map shows the Crimean Peninsula, the Sea of Azov to the north, the Black Sea to the east, and the Sea of Marmara to the south. Key locations marked include Kertch, Eupatoria, Sebastopol, Balaklava, Sinope, Dobruja, Silistria, Shumla, Varna, Scutari, Constantinople, and Gallipoli. The Crimean Peninsula is shaded in grey, while the surrounding seas are white.

SEA of MARMARA

Scutari

BLACK SEA:

Kertch

SEA of

1. The British army in Turkey and Bulgaria.

Insofar as Britain had any clear reason for declaring war on Russia in March 1854, she did so because a Russian army had invaded the Danubian Principalities in July 1853 and was, in theory at least, a threat to Constantinople; because Tsar Nicholas was claiming the right, under the treaty of Kutchuck Kainardji, to have a voice in the religious affairs of those Turkish christians who belonged to the Orthodox faith and because the Turks, having attacked the invading Russian army, seemed in danger of defeat.(1)

Fearing a Russian descent on the Turkish capital the allies hurried to dispatch troops to Constantinople, establishing camps in Gallipoli and in Scutari. The regiments making up the British contingent were sent in haste from the United Kingdom as and when they could be collected until by May the expeditionary force 26,000 men assembled in four divisions of infantry and one division of cavalry.(2)

Pending the arrival of Dr.Hall from India, Dr.Dumbreck acted as senior medical officer to the expeditionary force and it was he who sent the first dispatch back to Dr.Smith in London reporting that despite much confusion the medical officers were working well and bearing much discomfort with great good humour.(3) Throughout April and May the level of sickness among the British troops had been extremely low, and there seemed little reason for Smith to feel apprehensive about the health of the troops.(4)

By early June the Russian advance through the Principalities had been halted at Silistria, more than two hundred miles to the north of Constantinople, and the allied commanders, Lord Raglan and Marshal St.Arnaud, decided to assist the Turkish army by moving the expeditionary force to the Black Sea port of Varna with the intention of marching from Varna to Silistria and attacking the Russians in the flank. The British troops sailed during the week of 13 June and on arrival pitched camp in and around the port.

Varna looked well enough from the sea, prettily situated on the north side of the bay, with high wooded hills behind it, but the town itself smelt of every sort of abomination and its tumbledown houses provided shelter for a multitude of large black fleas. (5) The surrounding countryside was, in the opinion of one young officer, somewhat like the Cape, being covered with thorn so thick as to be almost impassable but once penetrated the vegetation gave way to vine yards and orchards producing fruit in abundance.(6)

In Varna itself the French and British medical departments were allocated a Turkish barracks for their joint use as a General Hospital. Dumbreck, who had travelled to Bulgaria with the expeditionary force pending the arrival of Hall, was now less optimistic in tone when he described it to his Director General.

It consisted of a ground floor and upper story; the upper story was, however, not separated from the lower, but was like the gallery of a church. The square (court yard) was a few inches below the level of the ground floor, and a causeway ran down the centre where water lodged and remained until dispersed by evaporation; and as in the angle of the square there was a fountain, the water thus formed a perennial marsh. One side of the square consisted of privies of immense size, one of them close to the fountain, and the drains connected with these were broken.

No words could describe the state of the rooms when they were handed over for the use of the sick; indeed they continued long after, from the utter inability to procure labour, rather to be fitted for the reception of cattle, than sick men. Myriads of rats disputed the possession of these dreadful dens and fleas were in such numbers that the sappers employed on fatigue refused to work in the almost vain attempt to clean them. (7)

Whilst in Turkey the men of the expeditionary force had been in excellent health but within a few days of landing in Varna an increasing number fell sick, diarrhoea became universal, many also displayed the symptoms of malaria and then, as if to compound their sufferings, by mid-July an epidemic of cholera broke out in both armies.

The first cases had been recorded a month earlier in French soldiers arriving at Gallipoli from Marseilles and Toulon. If the French doctors had been permitted to impose quarantine regulations the infection might have been contained within Turkey but, in the event, they were over-ruled by Marshal St.Arnaud, who wished his army in Varna to be reinforced without delay. In consequence the first French ship carrying men afflicted with the disease arrived at Varna on 10 July and thereafter the infection spread through both armies and both fleets with great rapidity.(8) As more and more men became ill a great lethargy seemed to settle over the camps and men, languid and gloomy, moved slowly and painfully from one site to another in a vain attempt to escape from the scourge. At the camp of the 1st.Division, ten miles from Varna, the Divisional Commander forbade the drinking of alcohol, believing that it was injurious to the health of his men, thus making it more likely that they would drink water contaminated with the cholera vibrio. (9)

In the General Hospital at Varna the first death from cholera took place on the night of 20 July and thereafter the disease spread through the wards killing men convalescent from other diseases.

The French lost five men by cholera last night and have 47 under treatment. Unfortunately it has made its appearance in the wards of our hospital and one man, who had been sixteen days in hospital with diarrhoea was attacked with symptoms of cholera last evening and died at mid-night; another man in the same ward was attacked this morning and is dying. He was admitted on the 3rd. with fever and was convalescent from the disease. (10)

The French losses were especially heavy and when the Times correspondent visited the French portion of the General Hospital at Varna and asked the sous-officier the purpose of the fifteen arabas drawn up in the square, his answer, sullen and short, was " Pour les morts. Pour les Francais decedés, Monsieur." (11)

A few days earlier St.Arnaud had boasted that the health of the French army was excellent and when referring to the few cases of cholera which had been diagnosed stated that he had taken all necessary precautions. (12) When, shortly afterwards, these precautions seemed to be failing, he arranged for three of his divisions to exercise in the Dobrudja, a barren, marshy region to the north of Varna. The troops moved off on 21 July but had barely reached Kustendji, twenty five miles from Varna, when they were stricken by cholera. Within a few hours hundreds of men were dying in agony, unattended either by doctors or medical orderlies. The three divisions began to retreat in disorder, marching south towards Varna but within the course of a few days more than 5000 of General Canrobert's Zouaves had perished and St.Arnaud's mood of confident optimism had given way to dejection. (13)

If the British dead were fewer in number their losses were still high, especially amongst those troops newly arrived from the United Kingdom, and though the doctors laboured unceasingly they could do little to relieve their sufferings.

Those fortunate enough to not to be infected by cholera were still mostly unwell and of the many discomforts they were called upon to endure fever was particularly debilitating, as Captain Sir Charles Russell recorded in a letter to his brother.

My hand shakes a great deal and one of those sultry east winds is blowing. I know nothing which makes one so languid...I had got as far as this and was obliged to give up writing as I was so weak. I am hardly in better plight now though five days have passed... (14)

By September 1471 men from the British expeditionary force had died from cholera and 2624 were still in hospital.(15) The General Hospital at Varna was full and, as Smith's advice on the need for hospital ships had been ignored by the admiralty, sick soldiers were being sent to Scutari under conditions of great discomfort as fast as troopships could be procured.

By the time the allies landed at Varna in June the Russian advance through the Danubian Principalities had foundered at Silistria and shortly afterwards the Tsar, under pressure from Austria, recalled his troops.

Thus as the allied armies melted away from disease their reason for being in Bulgaria had been taken away. Although a return to Constantinople would have been prudent the true purpose of the expedition now became clear. Despite the misgivings of the Prime Minister, Lord Aberdeen, the Cabinet desired the seizure and destruction of the Russian naval base at Sebastopol. (16)

The views of a majority of the Cabinet were outlined by the Secretary of State for War in a letter written to Lord Raglan, dated 28 June 1854. There was, in the opinion of the duke, no profit in the Allied armies remaining in Bulgaria and even if the Russians recrossed the river Pruth and occupied the Principalities yet again no measures needed to be taken to dislodge them; rather, the time had arrived to concert measures for the siege of Sebastopol.(17)

The plan to attack Sebastopol received the enthusiastic support of the French Emperor, Napoleon III, who was keen to mark his assumption of the Imperial title with a feat of arms which would remind his subjects that the glories of the First Empire were now to be matched by those of the Second. More cynically he perceived also the need to maintain catholic support in the Midi, especially amongst the Levantine traders of Marseille.

Despite the enthusiasm of the Emperor the enterprise was hazardous in the extreme. No one in authority among the allies, save perhaps the British ambassador to Constantinople, Lord Stratford de Redcliffe, had any knowledge of the Crimean peninsula and both Lord Raglan and Marshal St.Arnaud were in ignorance of the strength and disposition of any Russian forces likely to oppose them. Moreover, the Russian Black Sea fleet had not been destroyed by the allies and might well attack the ships transporting the armies at the time of landing.

On receiving his instructions from the duke, Lord Raglan sent for his senior divisional commander, Sir George Brown, and expressed a wish to hear his opinion. After reading the duke's dispatch Sir George asked what information Lord Raglan had about the strength of Sebastopol and what force he expected to oppose the army on landing. Lord Raglan's answer was that he

had no information whatsoever but that he and Marshal St.Arnaud believed that the Russian forces in the Crimea did not exceed 70,000 men.

Sir George then said in reply that,

You and I are accustomed, when in any great difficulty, or when any important question is proposed to us, to ask ourselves how the Great Duke would have acted and decided under similar circumstances. Now, I tell your Lordship that, without more information than you have appeared to have obtained in regard to this matter, that great man would not have accepted responsibility for undertaking such an enterprise as that which is proposed to you. (18)

Unfortunately for the British army in the East, Sir George then overrode this eminently sensible advice by telling Lord Raglan that he had better carry out his instructions lest he be replaced by another general more compliant to the wishes of the Secretary of State.

Shortly afterwards Lord Raglan wrote to the duke and informed him that the invasion of the Crimea would proceed, " More in deference to the views of the British Government, and to the known acquiescence of the Emperor Louis Napoleon in those views, than to any information in the possession of the military and naval authorities." (19)

On 27 July Lord Raglan asked Admiral Lyons to take charge of the embarkation and dis-embarkation of both armies. The difficulties facing the allies were daunting to all save the most optimistic. The level of sickness in both armies was still high, the British were short of land transport, the French were deficient in shipping. The landing in the Crimea would take place on an open beach and might be opposed. Admiral Lyons was short of small boats in which to ferry men, horses and stores from ship to shore and but for the ingenuity of the master of the Cyclops, Mr.Roberts, who designed a pontoon from Turkish

longboats lashed together and planked over, would have been hard put to it to have landed the army with the degree of speed necessary under the circumstances.(20)

As preparations for the embarkation of the troops began Dr.Hall, who had not received any official notification that a landing in the Crimea was to take place, wrote to the Quarter Master General on 11 August expressing concern about the movement of medical supplies and asking that provision be made for the transport of 400 tons of stores in addition to the men, horses and waggons of the ambulance train. (21) His letter was not acknowledged until 26 August when he was told that the expeditionary force was to sail on 1 September. There was now little time left to move stores and men to the point of embarkation nor was the task made easier as each division, camped outside the perimeter of Varna, marched into the town bringing in its wake hundreds of sick from the regimental hospitals few of whom could be accommodated in the General Hospital. Hall overcame the problem by sending as many as possible to Scutari whilst establishing a tented camp for the remainder on the Galata Heights.

Once Hall received confirmation that the invasion fleet was to sail he issued instructions to his staff on the ways in which the medical services were to be set up in the Crimea.

The ambulance equipment for each division was to be kept in two large store waggons to be parked at the headquarters of the division where it was to be in the charge of the purveyor's clerk. Each waggon was to contain a reserve supply of medicines, medical comforts, tents and bedding.

Each battalion surgeon was to procure a pack horse on which to carry his instruments, together with medical comforts, medicines and surgical materials.

A spring waggon was to be attached to each battalion which would be used to remove the wounded from the field and which would carry the hospital canteens, sets of bedding, stretchers and the hospital marquee when the army was on the move.

Canvas bearers (stretchers) with poles and shoulder straps would be carried in the regimental medical stores in the proportion of two for every hundred men.

Before a division took the field, the principal surgeon was to satisfy himself, by personal inspection, that the equipment of each surgeon was complete in every respect.

When action against the enemy seemed inevitable, the surgeon of each regiment was to make arrangements for the removal of the wounded from the field and was to instruct the stretcher bearers in the use of a tourniquet.

When the army was advancing, the medical officers were to follow with the spring waggons and bearers. When the army deployed for action the medical officers were to move to the rear, out of musket range, in order to prepare for such surgical operations as were necessary, but one medical officer in each regiment was to remain with the troops, so as to be on hand to check hemorrhage and to expedite the removal of the wounded to the rear and for this purpose would have the bearers under his charge. Each of the bearers was to carry appropriate medical equipment and one in three was to be armed in order to protect the others against marauders.

The site selected by the senior surgeon for the reception of the wounded was to be as sheltered as possible and marked clearly. If houses were near they were to be taken into use and supplied with water and with straw for bedding.

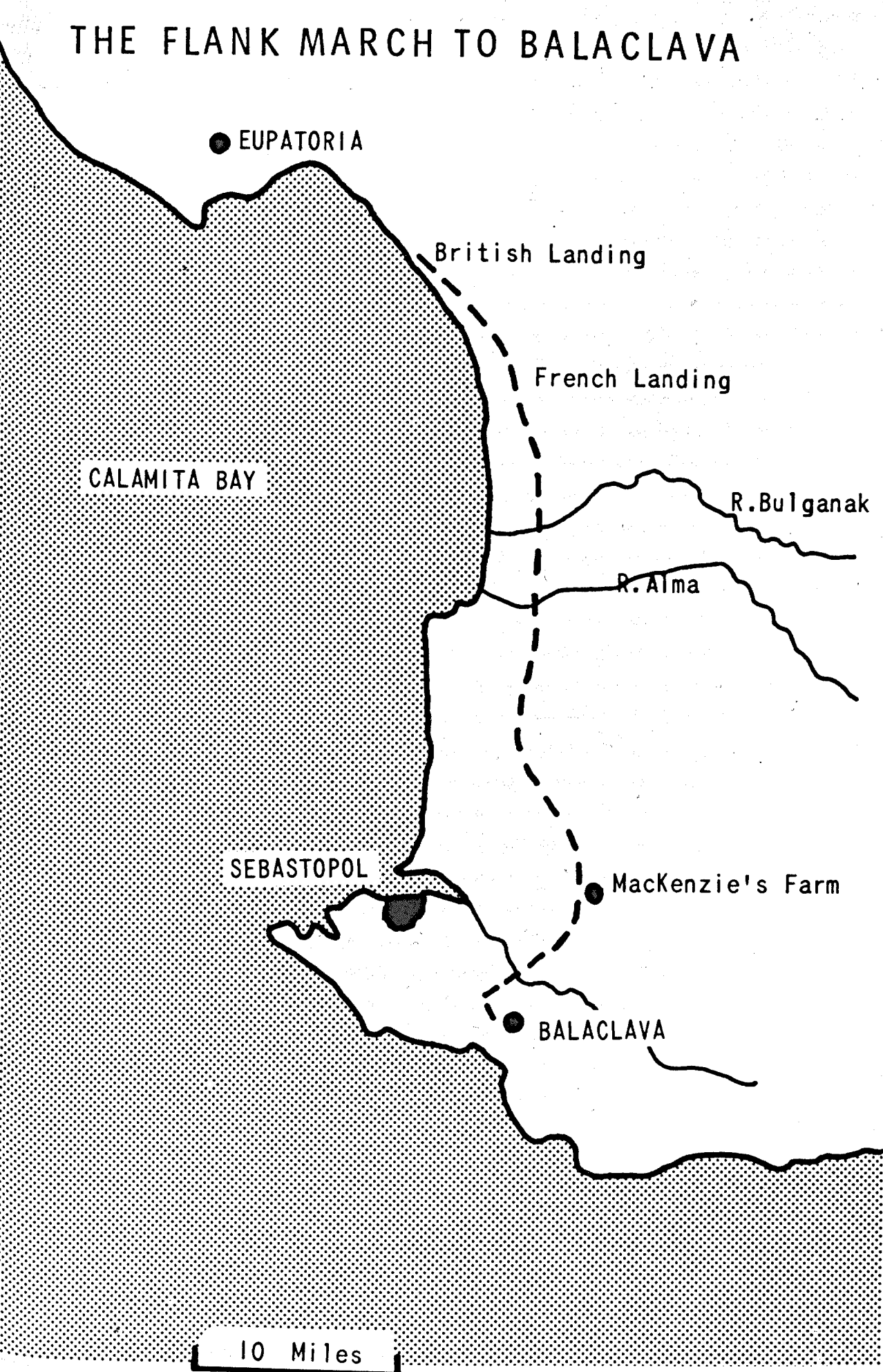
When the army advanced regimental surgeons were to advance also leaving the sick and wounded in the care of the assistant surgeons. If the army met with a reverse then all available transport was to be pressed into service for the transport of the wounded. Colonels of regiments were not to withdraw medical officers from the field in order to attend to individuals nor were they to appropriate the spring waggons for their own use; moreover, particular instructions were to be given to prevent bandsmen, drummers or pioneers, told off to assist the wounded, from being left in charge of officers horses or effects.

If the army landed on the enemy's coast when there was an opposing force to meet it, then the men should eat before disembarking. Medical officers were to land with the last boats and assist in the removal of wounded. When a landing had been effected the surgeon's horse was to be among the first to be brought ashore.

As soon possible after an action had taken place, the senior medical officer in each division was to compile a list of casualties for transmission by the Inspector General of Hospitals to the General Commanding-in-Chief. (22)

Despite the criticism soon to be levelled at him, Hall's memorandum revealed forethought and planning. Within three weeks his practical skills in the field were also to be put to the test.

THE FLANK MARCH TO BALACLAVA



2. The landing at Calamita Bay.

The allies set sail for the Crimea on 7 September 1854. The 26,800 men of the British expeditionary force were transported by both steam and sail, 27 steam and 55 sailing vessels being organized in six divisions. Each steam ship towed two sailing ships and the whole fleet was escorted by sixteen warships under the command of Admiral Lyons.(23)

After an uneventful passage, the fleet arrived in Calamita Bay, thirty five miles to the north of Sebastopol, in the early hours of 14 September and anchored off the Old Fort. Looking towards the shore from the transports the soldiers could see a long sandy bay, shallow cliffs of sandstone and beyond the shoreline, a salt water lake. Save for a troop of Cossacks, riding small shaggy ponies, there were no signs of the Russian army. The French were the first to land and no sooner had the leading boat grounded than the French sailors were digging a hole in which to place the standard for the tricolour.(24)

The British troops began disembarking at 9 am. and soon the mile of water between the ships and the shore was alive with small craft ferrying guardsmen, fusiliers and infantry of the line. Despite their evident high spirits, for all were excited at the prospect of action after so many months of inactivity, they had brought cholera with them from Bulgaria, and as the day progressed numbers fell ill and died before even glimpsing their Russian opponents.(25)

By nightfall it was raining heavily and as the British troops had not been allowed to land their tents and stores they could only cast envious

glances in the direction of their allies, comfortably installed in their field tents surrounded by a more than adequate supply of equipment.

Even as the troops landed the difficulties which Dr. Hall encountered in dealing with the increasing number of sick seemed to forshadow the greater ones which were yet to come.

Went on board the Andes. 40 sick belonging to the 33rd. Regiment. Cholera has prevailed extremely and fatally on board the vessel since she left Varna. She is very dirty and badly ventilated. One officer of the 33rd. died of cholera and Assistant Surgeon Fulton is dangerously ill with typhoid fever... Probable number of sick on board transports 600 but as yet I have not received all the returns.

Slept on board the John Masterman last night and got the sick divided between the Kangaroo and the Dunbar, in all about 750. Lord Raglan seemed to think that I had occasioned the confusion and I was compelled to tell him that no returns of sick had been sent to me and that, until collected, I had not the least idea of their numbers. To add to the difficulties the agent of transports had ordered all the women, as well as the sick, on board the Kangaroo.

Found two of the ambulance waggons on the beach but without either horses, harness or drivers. Landed the 60 ambulance men from the John Masterman with their bearers, but the feeble old men will be of little use, in fact if they manage to take care of themselves it will be as much as they will accomplish. The amount of transport available is so small that I can only get six small arabas. What we shall do if we come in collision with the enemy I don't know. (26)

3. The battle of the Alma river and the flank march to Balaclava.

Three days after landing in the Crimea, the allies began their advance towards Sebastopol, taking the coastal route and moving forwards on a front four miles wide. Lord Raglan and Marshal St. Arnaud now faced formidable difficulties. Their armies were marching across unknown territory; they still had no information about the strength and disposition of the enemy's forces; their men were much weakened by disease and even as they marched more and more fell out, some overcome by fatigue, others seized by the

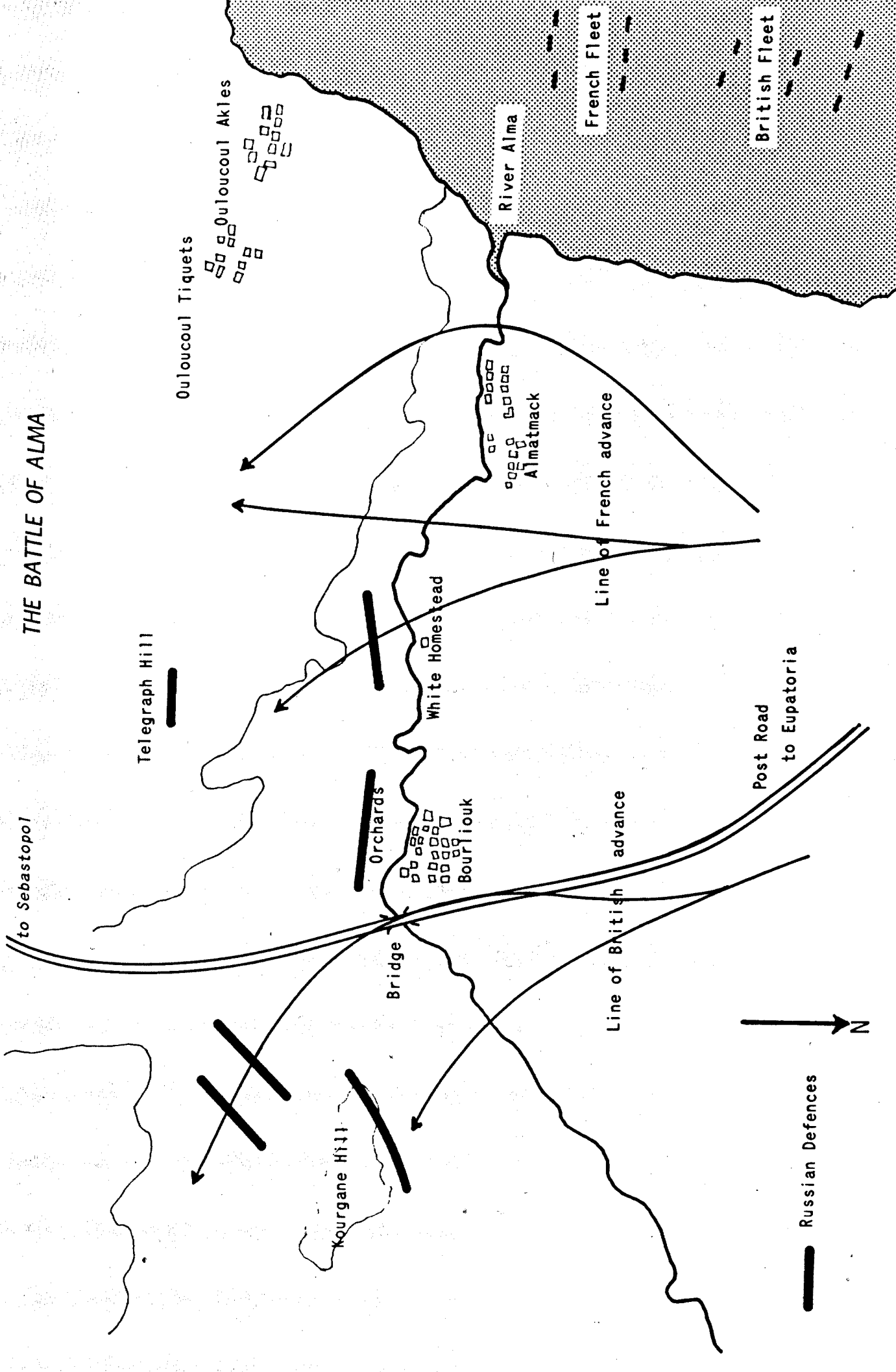
symptoms of cholera. In the absence of transport, the sick were left by the wayside in the hope that they would be carried back to Calamita Bay by the sailors detached from the fleet to act as bearers.

The British troops marched on the left in columns of divisions, the Light and Second divisions in front of the 1st. and 3rd with the incomplete 4th. division bringing up the rear. The French marched on the right and were thus protected on their right by the combined fleets and on their left by the British. Marching on the left the British were vulnerable to attack on three sides and as a protection squadrons drawn from the Cavalry division were deployed to the front, to the left and to the rear, in company with skirmishers from the Rifle Brigade. In marching on the left the British soldiers were between four and five miles from the escorting ships, a factor which was to delay the evacuation of the wounded in the battle to come.

The first sight of the enemy came in the afternoon when four squadrons of cavalry under the command of Lord Cardigan crossed the river Bulganik and ascended the hill on the far side, where on the summit they saw Russian cavalry, about 2000 strong, drawn up on an adjacent hill. As the British cavalry prepared to charge, General Airey, still on the north side of the river, drew attention to an even larger body of Russians, less than five hundred yards from the English cavalry but hidden from their view.

The problem now was that of withdrawing the four squadrons with the least possible loss. Lord Raglan ordered General Airey to cross the river and tell Lord Cardigan of the danger. Fearing that Lord Raglan's orders were imprecise, Airey simplified them; Lord Cardigan was to withdraw his men

THE BATTLE OF ALMA



immediately. Somewhat uncharacteristically Lord Cardigan complied without argument and a small but important part of the English cavalry was saved from certain destruction. As they retired the Russians opened fire with field artillery killing three horses and wounding three men. Hall who, as senior medical officer, was riding with Lord Raglan had a clear view of the skirmish which he later recorded in his diary, also recording his mounting frustration at the lack of transport and the incompetence of the pensioners sent out to act as stretcher bearers.

The result of the cannonade was three horses killed and three men wounded, two of whom required amputation of the leg, one of the 11th Hussars and another of the 13th. Another man of the 13th. had the os calcis and the astragalus injured by a splinter of shell but the surgeon wished to try and save the leg. An effort is to be made tomorrow to get the three men to the shore and put on board ship. We now miss our ambulance waggons, and I found the quibbling old pensioners, who were landed from the John Merriman, taking advantage of an order to lodge their stretchers for the night in the waggon on the beach by lodging them there altogether. I overtook them marching along the road as an armed body and sent them back for their bearers but before their arrival the waggons had been re-shipped so that another source of transport has been cut off from us. (27)

As the English cavalry withdrew to the north the Russians retired in the direction of Sebastopol, leaving the allies to cross the Bulganak unhindered. After resting for the night the allies resumed their march on the following morning, moving slowly across the downland between the Bulganak and the river Alma, a distance of about seven miles. Once in the valley of the Alma it became evident that the first battle of the campaign was shortly to be fought beyond the south bank of the river, over terrain favourable to the defenders of Sebastopol. The Alma ran from east to west and, save near its mouth, was shallow enough to be forded. To the west, immediately beyond its far bank, stood the heights of Alma, a line of cliffs 300 to 400 feet high, running inland from the mouth of the river

for a mile and a half before giving way to sloping ground, broken by numerous ravines, which continued inland for another mile and then curved to the south to merge into Telegraph Hill. To the East, between four and five miles from the sea, the ground rose again to form a group of irregularly shaped hills, the Kougane, half-way up the most prominent of which the Russians had dug two gun emplacements, later called the Greater and Lesser Redoubts. The only break in the high ground beyond the south bank was a valley, half a mile wide, between the Kougane and Telegraph Hill, through which ran the post road from Eupatoria to Sebastopol. Two villages stood on the north bank of the river, Almatamak, half a mile from the sea, and the larger Burliuk, two miles further inland. Adjacent to Burliuk a wooden bridge carried the post road across the river.

The Russian commander, Prince Menschikov, believing the heights to be proof against attack, had left them undefended and deployed the greatest number of his troops on the Kougane and the remainder between the post road and Telegraph Hill. Since the allies had maintained their order of march, the French, together with a number of Turks, now faced the high ground to the right of Burliuk while the British faced the Kougane. The allied plan of attack was uncomplicated; on the far right the Turks together with the French 2nd. Division were to climb to the plateau above the heights and attack the Russians in the flank; further inland the French 1st. and 3rd. Divisions were to storm Telegraph Hill. Once the French attack was underway the British 2nd. and Light Divisions were to move towards the Kougane supported by the 1st. and 3rd. Divisions. In the event the heaviest fighting took place on the left of the line as the British attacked the gun emplacements in the Greater and Lesser Redoubts and the brunt of the casualties were borne by the British 1st. and 3rd. Divisions.

The order to deploy was given at 1.30 pm. The weather was hazy and visibility was further impeded by the smoke from buildings in Burliuk which had been set alight by the Russians. On the far right the French and Turks scaled the heights in loose skirmishing order and on the left the British Light and Second Division moved down the valley in disciplined ranks until coming under fire from the guns on the Kougane. They were then ordered to lie down until the French had secured the right of the line but within a short time it became plain that the progress of the French and Turks was being impeded by Russian troops on Telegraph Hill. The order to advance was again given and on the word of command the line of infantry, two men deep and two miles wide, rose from the ground, took up a dressing and continued down the valley.

As the men of the 2nd Division neared the river their progress was impeded by the fires burning in Burliuk and they began to crowd against the right of the Light Division until within minutes five regiments were jammed together beneath the slope leading to the Great Redoubt where they were under fire from the Russian gunners. Seeing that the line of advance had been lost General Codrington then ordered his Brigade to move forwards to the Great Redoubt and as his men neared the emplacement the Russian gunners limbered up and drove off leaving the Redoubt empty save for one 24lb. brass howitzer.

Despite this initial success, Codrington's men were now isolated from the main body of the allied armies and in some danger of being overwhelmed by superior numbers. On the right, the 7th. Fusiliers were fighting Russian troops from the Kazan battalion whilst above them no fewer than eight

more Russian battalions were still uncommitted. On seeing the danger Codrington sent his A.D.C. to General Bentinck, Brigadier commanding the Guards Brigade asking for support. Bentinck immediately ordered the Scots Fusilier Guards to advance without first permitting them to form their line. For a few moments their advance faltered and then relief came from the Grenadier Guards on the right and the Coldstream on the left. Marching as if on parade in Hyde Park the Guardsmen fired volley after volley into the massed columns of Russian troops until they gave way.

On the left of the Guards Brigade, the Highland Regiments, commanded by Sir Colin Campbell, took up their dressing and advanced on the Lesser Redoubt securing it within minutes.

To the right the 2nd Division had finally negotiated the burning buildings in Burliuk, crossed the river and advanced on either side of the Post road whilst the French had secured Telegraph Hill. Under the combined assault the Russians gave way and began retreating in the direction of Sebastopol. Thus in less than three hours the men of the British Light, 1st. and 2nd. Divisions had defeated a force of 29,000 men and captured strongpoints which Prince Menschikov had believed to be impregnable.(28)

The battle cost the British the lives of 25 officers and 327 men, 73 officers and 1,539 being wounded. Casualties were highest among the men of the 1st. and 3rd. Divisions, all of whom had been exposed to galling fire in the assault on the Greater and Lesser Redoubts.(29)

The greater number of injuries had been caused either by shell fragments or grape shot and were generally severe in nature requiring immediate surgery. As instructed the regimental surgeons established their aid posts near

to the field of battle while Dr. Hall set up a general hospital in a farmyard in the village of Burliuk. Battalion surgeon Wyatt of the Coldstream Guards wrote later about his experiences during the battle.(30)

The casualties were two officers and twenty-six men wounded. One of the officers and one of the men underwent amputation at the shoulder joint. The second officer lost a great deal of blood on the field from the femoral artery which had been severed by a round shot. The injury was complicated by a comminuted fracture extending into the knee joint which rendered amputation of the limb necessary. A ligature had been placed on the protruded artery by a medical officer, who had found him lying on the field, but he sank shortly after the amputation had been performed, although a considerable time was allowed to elapse after receipt of the injury to enable the constitution to recover from the primary shock which it had sustained.

A field hospital bivouac was speedily formed by the side of a bank, intervening between a vineyard and the river which, for a good and constant supply of water, was a most desirable situation. Here a bell-tent was pitched; but, before it could be arranged, it was necessary to operate on the officer wounded in the shoulder, which was done while he was partially under the influence of chloroform and seated on one of the hospital panniers.

Staff Surgeon Alexander's experiences differed little from Surgeon Wyatt's although as a staff surgeon operating in the general hospital at Burliuk he was responsible for the treatment of many more patients. For the whole of the first day and part of the second he was required to operate on patients, who, from a want of equipment, were being nursed on the floor until an old door was discovered which then served as an operating table.(31) By the time darkness fell at the end of the first day many wounded were still lying untended on the field and it was to be another twenty four hours before all had been brought to Burliuk. Hall was then faced with the problem of moving them to the beach four miles away in order

that they could be taken on board the ships which were waiting to sail to Scutari. The lack of ambulance transport was again much felt and but for the assistance of the sailors of the Naval Brigade the evacuation of the wounded would have taken even longer; in the event it was three days before all had been embarked.

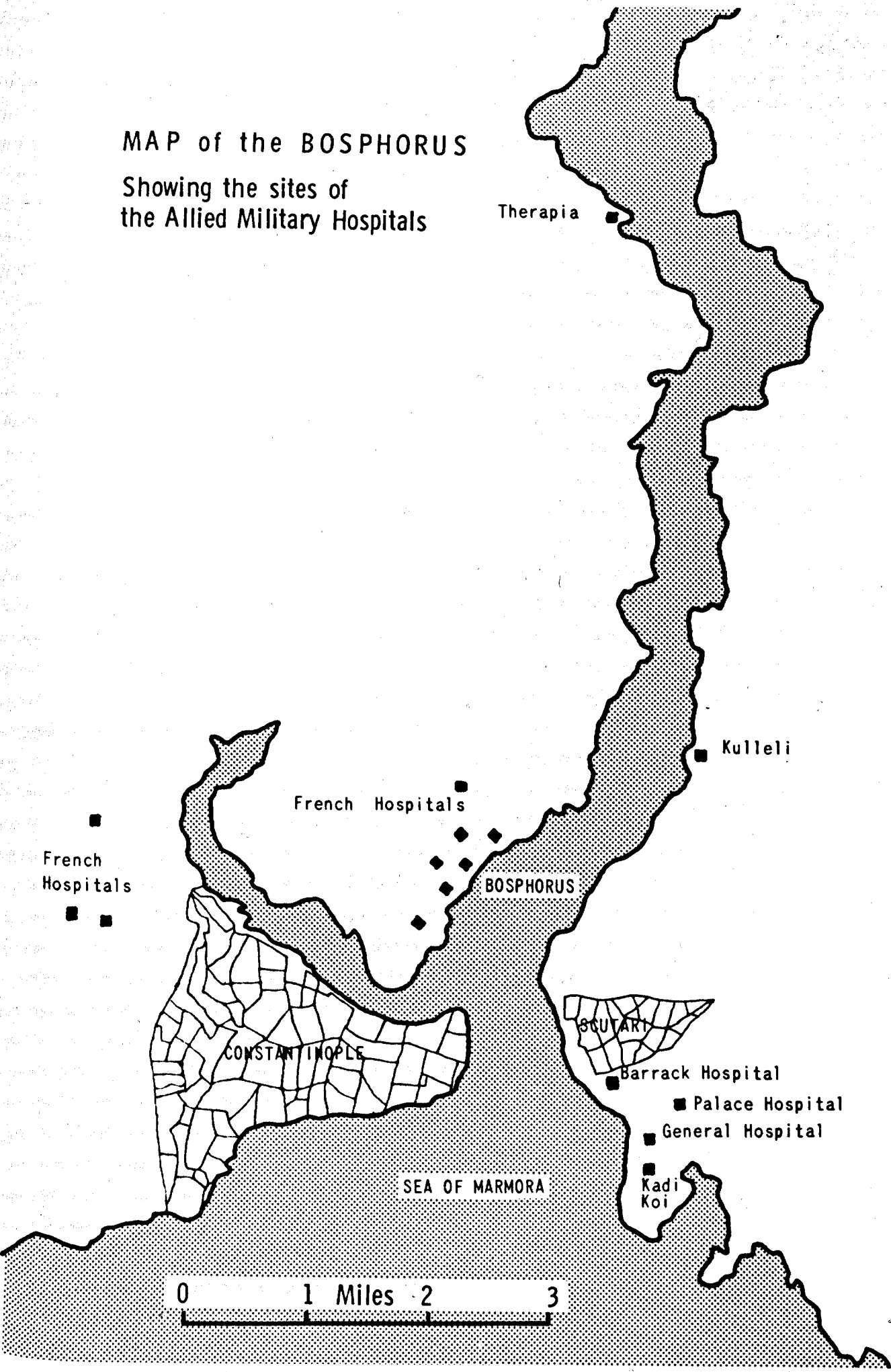
The Allies had won a great victory and had they followed it up by attacking Sebastopol immediately the town would, in all probability, have fallen, for Prince Menschikov's army was by now hurrying to Mackenzie's Heights, ten miles to the north east. Instead, Lord Raglan, seemingly out of misplaced feelings of compassion towards the sick and wounded, chose to remain at the Alma until all had been carried to the beach.

Resuming their march on 23 September the Allies set out at dawn and took all day to cross the table land between the Alma and the river Katcha. After bivouacking for the night on high ground beyond the Katcha they continued the following morning and reached the river Belbeck by nightfall. The Star fort, to the north of Sebastopol, was now in view, and the sight of its stone defences seemed to shake the confidence of Marshal St.Arnaud, who proposed that the Allies should skirt the town and establish a base camp to the south before beginning their attack.

Although Lord Raglan favoured an attack from the north, he was persuaded that an attack from an established base in the south offered the greatest chance of success and on the morning of 25 September, with the British in the lead, the two armies marched S.S.East for six miles through a tangle of dense brushwood until they reached Mackenzie's Farm

MAP of the BOSPHORUS

Showing the sites of
the Allied Military Hospitals



where a detachment of the Scots Greys fell in with and captured the baggage train of a Russian column retreating from Sebastopol. The armies camped for the night on the Fedukine Hills and reached Balaclava the next morning.

The Times correspondent confessed himself astonished at his first sight of the port whose harbour he saw as no more than a little pond, half a mile in length and 200 yards in width, surrounded by high hills, the sides of which were so precipitous as to make the harbour seem even smaller. A few mean and ramshackle houses provided shelter for the inhabitants and above the cliffs the remains of a Genoese fort housed sixty men who surrendered after firing a few shots in the general direction of the allied soldiers.(32) As the men of the Light Division dropped down from the surrounding hills they saw Admiral Lyon's flagship, the Agamemnon, already at anchor.

Lord Raglan had now to decide whether to remain at Balaclava or to take possession of another small port, Kamiesch, ten miles to the west. He chose to remain in Balaclava, a decision which was to have unfortunate consequences in the months to come for the port was seven miles from Sebastopol, the few roads leading from it were unmetalled and were to become impassable after the winter storms, it was surrounded by high cliffs and though its harbour was deep enough for the largest ships, its entrance was narrow and difficult to negotiate.

The allies had arrived at Balaclava on 26 September; three days later Marshal St.Arnaud died on board the Berthollet and command of the French army passed to General Canrobert, who at once declared himself in favour

of a siege rather than an immediate assault on Sebastopol.

Lord Raglan, much concerned to maintain amity between the allies, acquiesced and a second opportunity to attack the town whilst its defences were incomplete was lost. In the weeks that followed siege guns were landed and batteries established to the south.

During this period Dr. Hall established a new hospital in an old building adjacent to the harbour where his chief task was still to treat the many soldiers infected with cholera and dysentery.

Balaclava surrendered after only short resistance. Here there is a harbour for shipping and accommodation for 150 sick. For this duty 2nd. Class Staff Surgeon Cooper is to remain in charge with his assistants. The hospital is fitted with bedsteads, there is bedding and other conveniences. 244 sick sent into hospital at once, many of them moribund from cholera. 10 men died in the course of the night.

Sick continue to pour in from the divisions, labouring under cholera and fever. Accommodation on shore quite full. Application made for a ship to put them in. 420 sick and still more pouring in from all quarters. Accommodation on shore quite full. 220 men sent on board a transport.

Sickness continues to prevail in the whole army from exposure. Cholera particularly destructive amongst the newly arrived troops. I have urged the necessity of the men having tents. At present all attention is absorbed by the landing of material for the siege which will commence in two or three days and is not expected to last more than a week. (33)

But in the midst of his labours at Balaclava Hall was suddenly ordered to Scutari to investigate the alarming stories circulating about conditions in the Barrack hospital. Arriving on 4 October he was to spend the next three weeks struggling, with little success, to restore order to a chaos far greater than anything he had yet experienced in the Crimea.

4. The breakdown in medical administration at Scutari, September-December 1854.

On 9 October 1854 the Times carried the first of three dispatches from its correspondent in Constantinople, Thomas Chenery, in which he described the arrival of the sick and wounded from the Crimea after the battle of the Alma. He reported that certain regiments had been almost destroyed and added that it was well that the preparations for receiving the sick were as complete as they were. The sick and wounded passed with celerity from ship to shore and into the wards prepared for them and were wonderfully improved by the air of the Bosphorus. He warned of the increasing fatigue of the doctors but seemed satisfied that all that could be done was being done.

Three days later the tenor of his reporting had altered and he was openly critical of the army medical department. Insufficient preparations had been made for the proper care of the wounded. There was no preparation for the commonest surgical operation. Far from passing from ship to shore with celerity, men were kept waiting at sea, often for days at a time and when finally placed in the building prepared for them, lacked the commonest appliances that might be found in a workhouse. He concluded his dispatch by asking if men had to die because the medical staff of the British army had forgotten that old rags were necessary for the dressing of wounds.

By the following morning his critical faculty seemed to have given way to feelings of outrage at the sight of so much human misery and in a dramatically written passage he compared the treatment which the British soldiers were receiving with that they might have received at the hands of the savages of West Africa.

It is impossible for anyone to see the melancholy sights of the past few days without feelings of surprise and indignation at the deficiencies of our medical system. The manner in which the sick and wounded are being treated is worthy only of the savages of Dahomy.

Our whole medical system is shamefully bad. Worn out pensioners, brought out as ambulance attendants, are totally useless and not only are surgeons not to be had but there are no dressers and no nurses to carry out the surgeon's directions. The French are greatly superior and their medical arrangements extremely good. Surgeons are more numerous and receive help from the Sisters of Charity who have accompanied the expedition and who attend the sick and wounded as they would in the most complete hospital.

We have nothing and the men must attend each other. The least that could have been done would have been to send out an efficient staff of surgeons. Surely the last battle had not come unexpectedly? The army had been in Varna for months and the expedition to Sebastopol long prepared. Medical men are neither rare nor ruinously expensive and now vessels are sent with a surgeon to 120 wounded.

As the worst is not over and has, indeed, hardly commenced the attention of the government may well be directed to this pressing want.

Six months earlier the expeditionary force had been sent off from the United Kingdom amid scenes of great public enthusiasm and following the victory at the river Alma the fall of Sebastopol was expected daily and had, indeed, already been reported erroneously by the Times on 2 October. The news that British soldiers, far from winning victories, were dying from disease in conditions of considerable squalor, shocked and angered the nation. It seemed that the system set up by Hall to cope with the sick and wounded, both in the Crimea and in Scutari, was failing in every particular and, what was worse, as news from other observers in Constantinople flowed in, it became clear that Chenery had not been guilty of journalistic excess, a point made by the Duke of Newcastle

in answer to a letter from Augustus Stafford, a member of parliament who had travelled to Scutari in order to observe conditions at first hand.

I am grieved and pained beyond expression at the contents not only of your letter but of two others which the same mail has brought me from Constantinople. I confess that I had great hopes that the reports which reached this country after the battle of Alma of the treatment of the sick and wounded had been much exaggerated and that if there had been a few instances of neglect the general management was only as defective as might be fairly estimated by the difficulties and novelties of the occasion. These hopes are dissipated.

There is a total want of system and the heads of those who have had control and preparation for this emergency must be utterly unfit for organization of any kind. (34)

Stafford's letter had made depressing reading.

There was no transport to carry the invalid soldiers from the heights above Sebastopol unless the regimental medical officers could procure mules from their French counterparts.

The General Hospital at Balaclava was overcrowded and insanitary with a want of furniture and equipment. (35)

The sick and wounded, waiting to be embarked upon the ships, were without shelter or comfort. If strong enough they sat on stones or fascines, if too weak to stand then they lay where they fell upon the quayside.

Once on board ship they were crowded together in the holds or on the deck. There were no hammocks, beds, ward furniture or ward equipment. There were no sick berth attendants and few doctors could be spared to make the journey to Scutari. Often the departure of a ship from Balaclava was delayed a week while a sufficient number of soldiers could be put on board to warrant the vessel sailing to Constantinople, a journey of between three and five days. (36)

It seemed that the difficulties of evacuating the sick by sea had begun immediately after the battle of the Alma, as was testified by James Peters, a naval surgeon.

On the day of the battle this vessel, with many others, was at anchor a short distance from the field of battle, but no notice was given to me that sick or wounded would be sent here; consequently no preparation was made for their reception. But early next morning a small steamer came alongside with 86 soldiers in the charge of an assistant surgeon from H.M.S. Agamemnon. No documents nor order about them was sent and I considered that no others were coming, and proceeded to arrange them on the main deck. About noon, boat after boat came alongside with the sick and the wounded and I was obliged to ask that a signal be made for surgical assistance. At about 6 pm., finding there were nearly 500 on board and that others were alongside, I requested the first lieutenant to prevent others coming on board. With so large a number of men coming on board so quickly any arrangement was out of the question and, with the exception of those first brought on board, the sick and wounded were placed indiscriminately on the decks, to the great risk of the wounded, for with diseases such as cholera and dysentery prevailing, the atmosphere became quickly tainted. The marines and sailors, albeit rough nurses, behaved in the kindest manner to the poor creatures but great distress was experienced for want of urinals and bed pans, one only of each being on board. From the want of these many blankets were thrown overboard on my orders because they became foul.

Although I do not feel called upon to blame anyone, there can be no doubt that, as from the time the army landed in the Crimea a battle was pending and sickness very rife, some arrangements should have been made and certain vessels fitted for the purpose. (37)

Once in Scutari the discomforts of the patients were frequently prolonged by the difficulties of landing. A wind would blow up and make the Bosphorus rough and then the boats in which the patients were carried to the shore could not make the passage. Frequently, in the expectation of their landing immediately they would not have been fed; if then their landing was delayed the pangs of hunger were added to their other miseries, as Augustus Stafford described in his evidence to the Select Committee. (38)

I have never seen human suffering greater than the pangs of famine superinduced upon diarrhoea. I used to know those who were most suffering, because they used to turn in their torture upon their bellies and I went generally with a saucepan to those who were on their bellies to raise their heads and pour some arrowroot down their throats.

The landing quay at Scutari was less than 100 yards from the two largest hospitals but the path leading from the water's edge inclined steeply and the Turkish stretcher bearers, generally indifferent to the suffering of their charges were quite likely to carry a man feet first up a slope as steep as a railway embankment.

Four buildings in Constantinople served as British military hospitals, the General Hospital, formerly a Turkish military hospital, having room for about 650 patients, the hospital at the Sultan's palace, accommodating 300 patients, a converted cavalry barracks at Kulleli, four miles to the north, accomodating 1200 patients, and the Barrack Hospital, formerly a Turkish barracks, a building of vast dimensions, having outside walls 220 yards by 190 yards in length, capable of holding more than 2000 patients but lacking the equipment and furniture necessary to transform a barracks into an hospital.

A sick or wounded soldier admitted to the General Hospital or to either the Sultan's palace or Kulleli received a standard of care comparable to that exhibited in an English poor law institution but, if unfortunate enough to be sent to the Barrack Hospital would have received little beyond the limited medical treatment which could be offered by the hard pressed doctors. The building was in a state of disrepair. The wards were badly ventilated and lacked furniture; there were insufficient beds and the degree of overcrowding was such that most corridors housed a double line of straw mattresses.(39)

In the Barrack Hospital very small provision had been made for converting it into a hospital at all. The sick occupied a series of wards, the flooring of which was in a very bad state; the flooring was open and rotten, and they lay upon the boards in situations where they could not obtain the necessary warmth in the treatment of their complaints...as the number of dysenteric cases increased, the ventilation became exceedingly bad... the corridors were occupied by patients, as well as the wards, and by double rows of patients, the result of which was that as the number of dysenteric patients increased, the emanations from them were carried into the wards adjoining and into the rooms occupied by the surgeons and officers.(40)

There was no hospital laundry and so the sick lay in the uniforms issued to them months earlier, though, in the case of the patients suffering from cholera or dysentery, these might be fouled by excrement. They were mostly suffering from malnutrition and yet such was the inadequacy of the hospital kitchens that they were fed with unsuitable food at irregular intervals. If suffering from bowel disorders their discomfort was heightened by the lack of nursing aids for there were few bed pans or close stools. If strong enough to walk they could not resort to the communal privies for their comfort since these were blocked and overflowing. There was a shortage of medical comforts and though there was a sufficiency of drugs and dressings the method of purveying was such that much delay took place between a surgeon ordering a medicine and the patient receiving it. The system by which the presence of a soldier in the hospital was recorded had broken down, a failure in medical administration which caused much distress both to patients and to dependants, as Corporal Patrick Kelly testified in a letter, later passed to Mr.Stafford.

I have received a letter from home stating that the staff officer received the quarterly return from the Secretary-at-War stating that No.360, Corporal Patrick Kelly, died at Scutari on the 22nd September last. I am sorry to say that this false report reached my wife and child; the above report putting a stop to her pension. I am also sorry to state that I cannot send her a trifle of money, nor yet can I purchase pen, ink, or paper to write to my broken hearted wife and child. (41)

And yet, while it was plain that the medical services in Scutari were on the point of collapse, the cause of the collapse was far from clear and the assertion by the duke that it was "for want of system," or the claim by the popular press that it was the fault of the doctors, ignored the immensity of the problem which had suddenly confronted them and, what was more, ignored the fact that Smith and his colleagues had earlier warned the authorities against almost every misfortune which had now overtaken the army.

The General Hospital in Scutari had been opened on 12 June to serve as a medical headquarters and base hospital for the entire expeditionary force but as it had fewer than 800 beds the Turkish Barracks had been acquired as a supplemental hospital providing space for another 2000 beds.(42) In the weeks which had followed, Dr.Menzies, the Principal Medical Officer in Scutari had made every effort to transform it into into a hospital but had received little cooperation from the authorities so that when the time came to open it in order to accommodate the sick and wounded from the battle of Alma it was still unfurnished and without the equipment necessary to nurse the sick. To add to Menzies difficulties it was then necessary to take in twice as many patients as could be nursed in its dormitories since by 15 October, the day on which Chenery's third dispatch was published in London, no fewer than 4190 sick and wounded soldiers had arrived from the Crimea. (43)

As Smith had been sending vast quantities of medical stores to the East by every ship available to him since the expeditionary force had left the United Kingdom in March, the lack of equipment for the Barrack Hospital was more difficult to understand and while much of it

had been diverted to Varna where, by October, it was still waiting shipment back to Scutari, large quantities still remained in Scutari unopened and unused in the holds of ships, on quaysides and in warehouses. (44) It seemed that the problem had less to do with any lack of equipment than with the reluctance of Mr. Ward, the senior purveyor to release it for use in the Barrack Hospital, a point made by Menzies in his evidence to the Select committee. (45)

There was also at this time considerable difficulty met in carrying out the duties connected with the purveying department, owing, in a great degree, to the advanced age of Mr. Ward, the purveyor, who appeared physically unfit for the active duties required of him, and having only two young and inexperienced clerks under him. Mr Ward's case having at length been submitted to the decision of a medical board, of which I myself was president, he was found incapable of performing the duties required of him, and recommended accordingly, for the interests of the service, to be allowed to retire. Notwithstanding this, Mr. Ward was not removed, and no successor appointed up to the time of his death in December last.

Ward's duties as senior purveyor encompassed every aspect of hospital life, save the treatment of patients, and he was required to supervise the issue of all stores, which in the case of the Barrack Hospital meant the issue of furniture, bedding, bedsteads, mattresses, sheets, blankets and patients' clothing; record keeping; the issue of invoices; the register of patients; the payment of staff and trades people; the safe keeping of the money and valuables which were the property of patients, the notification of deaths and the burial of patients. (46)

He was required to examine the diet rolls issued by the wards, lest these became excessively costly, and was specially charged with the supervision of the hospital servants. It was his duty to compile a defaulters' book and to bring any breaches of discipline to the attention of the senior medical officer. (47)

He was also responsible for the cleanliness of the hospital and its surroundings. It was his duty to arrange for all necessary repairs and to enter into contracts for the washing of hospital linen and patients' clothing. He was responsible for the hospital accounts and for the payment for goods and services received.(48)

If Ward's duties as senior purveyor were clearly understood it was less clear whether he was responsible to Dr.Menzies, the senior medical officer in Scutari or to Mr.Wreford, the purveyor-in-chief in London. His orders, given to him on his appointment by Dr.Smith, stated that he was to obey the instruction of the Inspector General of hospitals or his deputy, although if such instructions involved considerations of finance, he could, if he so wished, refer the matter to the Secretary of State.(49) Once in Scutari, however, Ward refused to accept his subordinate role believing that he was answerable only to Wreford, a view apparently shared by the purveyor-in-chief.

I claim the right of superintendence, control, and distribution of the officers and clerks of my own department, not only by a previous understanding with the War Office before I accepted my appointment but also by the Secretary at War's instructions for my guidance. (50)

Ward, a Peninsula veteran of 68 years, had been appointed by Smith because he was one of the few officers in the purveyor's department with experience of campaigning but, in the event, proved a great trial to the medical staff, being slow and meticulous in his actions when it was necessary for him to be quick and flexible. It was, perhaps, a measure of the low esteem in which the doctors were held that Lord Raglan chose to overturn the findings of the medical tribunal and permitted Ward to remain in Scutari until his death from cholera in January 1855.

I believe Mr. Ward to be not only a very respectable man, but a highly efficient public servant; and Lord De Ros has frequently, since I assumed command of the army, spoken to me of his exertions and devotion to the service.

I can see no reason why he should be ordered home, contrary to his own wishes and feelings; and, as regards his age, I must observe that if it be put forward as an objection to his being employed here, it was equally valid when he was named purveyor to this army in the month of March or April last. (51)

Just as the news from Scutari had shocked the nation it had shocked Andrew Smith who, until the publication of Chenery's dispatches, had been given little reason to worry about the conduct of the medical services in the East and who, prior to 12 October, had felt sufficiently confident in his relations with the Secretary of State to write to Hall in optimistic terms.

I feel comfortable as regards my position with the authorities and I keep nothing from the Minister at War. (Sidney Herbert) One of your latest letters I gave to the duke to read on the understanding, however, that what it contained was private and I send you a note received from him when he returned it which will shew you the values he attaches to it. He is a most liberal man, a most delightful person to deal with, and I consider it a Godsend that he is where he is. You and I will lack nothing he can give us, I am happy to say. (52)

Once the news from Scutari became common knowledge the relationship with the duke and his subordinates was never again to reach such a level of cordiality.

Angered by the slighting references to his department, Smith wrote to Menzies immediately enclosing cuttings from the Times and the Sun newspapers, and asking, for example, why there should have been any deficiency of lint when no less than 2,500 lbs. had been sent out as a reserve store. (53) It was the first of many such letters of inquiry which he was to write in the months to come.

The Duke of Newcastle, no less angered and embarrassed by the news from Constantinople, determined upon an immediate investigation into conditions of the sick both in Turkey and the Crimea and appointed a three man inquiry under the chairmanship of a prominent Queen's Counsel, P.Benson Maxwell, but, as the report of the commissioners could not be forthcoming for at least three months, wrote anxiously to the numerous observers in Turkey seeking information from whomsoever it could be obtained.(54)

Beg anybody that you see, S.G.O. (Sidney Godolphin Osborne) or anybody else, to report to me what is wanted - what is possible - what can mitigate even in a slight degree the miseries of our noble soldiers. I do not deprecate letters to the press - I do not ask anybody to spare those who are guilty of neglect or indifference - however certain those letters will be turned against the Government and, of course, especially against myself, but I do ask that early information be sent when remedies can be provided, and that the interests of the poor sufferers may be paramount to every other consideration.

The suffering being endured by the soldiers seemed to strike a chord in the country as a whole and when, in a leading article published at the same time as Chenery's third dispatch, the Times called upon private benevolence to help, it met with an immediate response. Sir Robert Peel, son of the former Prime Minister, opened the fund on the following morning with a subscription of £200 and within a week more than £10,000 had been donated. An almoner, J.MacDonald, was appointed to administer the fund who, after obtaining a letter of introduction from the Duke of Newcastle to Lord Stratford de Redcliffe, British ambassador in Constantinople, set out for Turkey on 19 October.(55)

Chenery's dispatch of 28 September, published in the Times on 13 October, had compared the arrangements made by Menzies for the care of the sick with those made by the French doctors and found Menzies's wanting. The French medical services were, it seemed, in every way superior to the British; surgeons were altogether more numerous and were assisted by Sisters of Charity, more and more of whom were arriving in Scutari as each day passed.

On the following morning, her imagination fired by Chenery's reference to the French Sisters of Charity, Lady Marie Forester, a widow of strongly evangelical persuasion, wrote to Florence Nightingale, then matron of a private nursing home in Harley Street, and offered her the sum of £200, to be used to pay the cost of travelling to Scutari in company with three nurses. Miss Nightingale accepted the offer and after obtaining letters of introduction to Lord Stratford from Lord Palmerston and to Menzies from Smith, made her plans to leave London on 17 October. Before leaving she wrote to her close friend, Mrs. Elizabeth Herbert, wife of the Secretary at War, Sidney Herbert, explaining what she intended and asking if Mrs. Herbert would intercede on her behalf with the committee of management and obtain her release from Harley Street. (56)

A small private expedition of nurses has been organised for Scutari and I have been asked to command it. I take myself and one nurse...I do not mean that I believe the Times account, but I do believe we may be of use to the poor wounded wretches.

Her letter to Elizabeth Herbert crossed one written by Sidney Herbert asking her, Miss Nightingale, to take charge of a party of nurses to be sent to Scutari by the government to assist in the care of the sick and wounded.

..I receive numbers of offers from ladies to go out, but they are ladies who have no conception of what a hospital is, nor of the nature of its duties; and they would, when the time came, either recoil from the work or be entirely useless, and consequently, what is worse, entirely in the way.

There is but one person in England that I know of who would be capable of organising and superintending such a scheme; and I have been several times on the point of asking you hypothetically if, supposing the attempt were made, you would undertake to direct it.

The selection of rank and file nurses will be very difficult; no one knows it better than yourself. The difficulty of finding women equal to a task after all, full of horrors, and requiring, besides knowledge and goodwill, great energy and great courage, will be great. The task of ruling them and introducing system will be great; and not the least will be the difficulty of making the whole thing work smoothly with the medical and military authorities out there.

My question simply is this, would you listen to the request to go and superintend the whole thing? You would, of course, have plenary authority over the nurses, and I think I could secure you the fullest assistance and co-operation from the medical staff, and you would also have an unlimited power of drawing on the Government for whatever you thought requisite for the success of the mission.

I do not say a word to press you. You are the only person who can judge for yourself which of conflicting or incompatible duties is the first, or the highest; but I must not conceal from you that I think upon your decision will depend the ultimate success or failure of the plan.

If this succeeds, an enormous amount of good will be done now, and to persons deserving everything at our hands; and a prejudice will have been broken through, and a precedent established, which will multiply the good to all time.

I know you will come to a wise decision. God grant it may be in accordance with my hopes.

Herbert's letter had been written on Saturday 14 October but such were his feelings of urgency about the crisis in Scutari that he called on Miss Nightingale on the following Monday, before she had had chance to reply. Once she had indicated that she was willing to travel to Turkey he lost no time in telling the duke who brought it before a meeting of the Cabinet on 18 October, when it was unanimously approved. On the following day she received confirmation that she had

been appointed " Superintendent of the Female Nursing Establishment of the English General Hospitals in Turkey, " with authority over everything related to the distribution of the nurses; the hours of their attendance; and their allotment to particular duties, subject to the sanction and approval of the Chief Medical Officer. (57)

But, whether by accident or design, her authority did not extend to the nursing establishments in the Crimea, where a few devoted women were working in conditions little different from those in Scutari. The omission was to cause numerous difficulties for Hall, for Mrs. Bridgeman, matron of the hospital in Balaclava, and for Miss Clough, working in isolation at the camp of the Highland Brigade before Sebastopol.

Miss Nightingale was given £1,000 to meet the cost of the journey to Scutari for herself and her nurses and letters of introduction to Lord Raglan, Dr. Hall, and the Purveyor, Mr. Ward. All were instructed to assist her " in the performance of the arduous duties which she had undertaken."

Prior to her appointment she had planned to leave London on 17 October. She now postponed her departure until the 21st. while nurses were recruited, uniforms ordered and tickets bought. She took up headquarters in the Herbert's London house in Belgrave square where Mrs. Stanley, Mrs. Bracebridge, Lady Canning and Lady Cranworth waited to interview the expected rush of applicants. Few came, most were unsuitable and in the end only 38 could be engaged; of these, twelve had had experience of work in hospital while the remaining 24 belonged to a variety of religious orders. Later on, difficulties were to arise

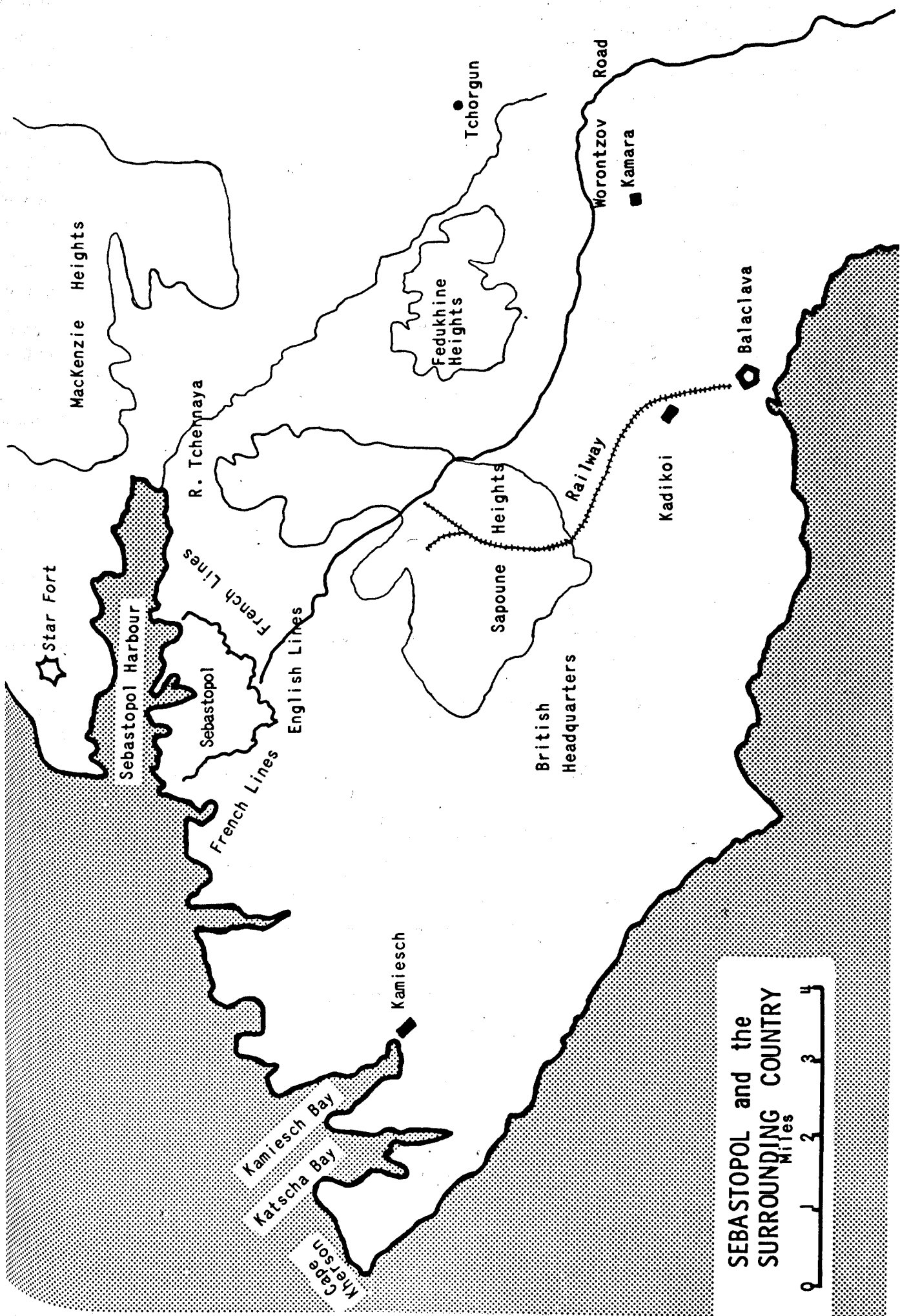
over the exact definition of a nurse. Those coming from the hospitals saw their duties as carrying out the instructions of the doctors; those from the religious orders were better behaved but apt to forget the physical needs of the patients in their desire to secure souls.

Those recruited from hospitals were to receive between 12s and 14s a week, rising after a year to 18s. Each signed a document submitting to Miss Nightingale's authority. None could leave hospital unaccompanied. Misconduct with a soldier would result in a return to the United Kingdom by a third class passage. Uniforms were to be unadorned by flowers or ribbons. Bought hurriedly and issued with scant attention to the size and shape of the recipients they were so ill-fitting as to be described as a "Triumph of grace over nature." (58)

They left London by train on 21 October; Almost overnight, Miss Nightingale had become famous. She carried the good will of the nation with her. The Government looked to her to bring order out of chaos. The duke wrote to Lord Stratford extolling her many virtues.

" Miss Nightingale was a most excellent and able lady, no namby philanthropist but one whose head as well as her heart was thoroughly in her work." (59)

Dr. Smith wrote to Menzies in Scutari informing him of her departure. He spared the principal medical officer any description of the lady's virtues but made it clear that Menzies was to co-operate. She would call on him on her arrival. The Government were most anxious that she should receive every assistance. She had instructions to consult him on all points connected with the employment of the thirty or so nurses. He was to apportion their duties. He was also to assemble the medical officers and inform them of the arrangement. It was the Director General's wish that they



SEBASTOPOL and the
SURROUNDING COUNTRY
Miles



used every endeavour to render the nurses useful in their position.(60)
It was all most exciting and within days of Chenery's articles appearing in the Times, the Government began to believe that it had taken the steps necessary to improve the conditions of more than ten thousand sick soldiers in Scutari. Thirty eight nurses, under the direction of the formidable Miss Nightingale were on their way.

But George Villiers, 4th. Earl of Clarendon, Lord Aberdeen's Foreign Secretary, when writing to Lord Stratford expressed a dissenting view which had more than a grain of truth in it.

The Times correspondent has done us infinite mischief by his description of wounds and suffering and hospital deficiencies. I fear there has been neglect in turning to account the abundant materia medica that had been provided, but we all know that upon the occurrence of any sudden disaster, be it cholera, be it a battle, no foresight can secure equal and immediate attention to all. (61)

5. The commencement of the siege of Sebastopol, October 1854.

Following the annexation of the Crimea by Catherine the Great in 1783, the naval base of Sebastopol had been built on the southern bank of Sebastopol Bay. The Bay, known also as the Roads, ran inland from the sea a distance of four miles, was half a mile wide and between 40 and 60 feet in depth; without shoals and rarely frozen in winter, it was held to be one of the finest natural harbours in the world and its southern bank was further indented by a number of secondary bays, of which the most important were, from west to east, Quarantine Bay, Artillery Bay, South Bay, the Korabel'naia or Shipping Bay and the Careening Bay. All were used by shipping but South Bay, more than a mile in length, was reserved for Russian naval vessels and could, if

necessary, accommodate the entire Black Sea fleet; running from north to south it divided Sebastopol into two, the Gorodskaja, or main town being to the west and the Korabel'naia, or new town to the east. The Gorodskaja, though built on an outcrop of rock 180 feet above sea level, was still lower than the surrounding hills and seemed to have been placed in the middle of an amphitheatre whilst the Korabel'naia was less exposed to view. Both towns accommodated all manner of workshops, drydocks, slipways, wharves and the Korabel'naia, housed in addition, the new admiralty buildings for the Black Sea fleet.

The northern bank of Sebastopol Bay, separated from Sebastopol proper by the Roads, half a mile wide, was less developed but accommodated numerous industrial buildings connected with the provisioning of ships, and was defended, in theory at least, by the Star Fort, though by the time the allies landed at Calamita Bay, this was in some disrepair and garrisoned by only a few second class troops.

The seaward defences of Sebastopol were formidable indeed and an allied vessel approaching the port would have faced fourteen coastal batteries, many emplaced in stone fortifications, strung out along the shoreline and mounting no fewer than 610 guns of varying calibre, ranging from bombards and carronades to 12 and 36 pounders, howitzers and mortars.(62)

But, if Sebastopol was almost impregnable from the sea, it had long been vulnerable from the land and though Tsar Nicholas had ordered a defensive line to be built around both the main town and the Korabel'naia as early as 1837, this was still incomplete. In September 1854 it consisted of no more than a series of strong points which,

from east to west were to be known by the allies as the Little Redan, the Malakov, the Redan, the Flagstaff Battery, the Central Bastion and the Quarantine Battery.

Months before, in Varna, when the allies had decided upon an invasion of the Crimea, the two commanders had been faced with one of two choices, either to land near to Sebastopol and attempt to take the port by coup de main or to sieze one of the small ports to the south and attack after first establishing a base of operations. Lord Raglan and Marshal St.Arnaud had chosen to attack directly but had then changed their minds on seeing the Star Fort on the northern bank of the harbour, reasoning that once an attack had been mounted, the Russians would block the entrance to the harbour and thus prevent the allied fleet from entering and offering support to the allied armies during the crossing of the Roads.

Having skirted Sebastopol and established bases in Balaclava and Kamiesch the allies were faced with the task of mounting a siege. A preliminary reconnaissance of the heights in front of the port revealed that its defences to the south were more formidable than Lord Raglan had been led to believe. (63)

From the west a stone wall, twelve feet high and six feet thick with a ditch in front of it, ran from Artilley Bay to the Central Bastion and was defended by numerous pieces of heavy artillery. To the south east of the Central Bastion, but separated from it by a deep ravine, was the Flagstaff Bastion, an earthwork occupying a commanding position

and mounting a battery of heavy artillery. To the east of the Flagstaff Bastion, but separated from it by the dockyard creek, was another battery of heavy artillery dug into the earthworks of the Redan and protected in the rear by other batteries; the semi-circular stone tower of the Malakov, mounting five guns en barbette with ten more guns on either flank; the incomplete but armed Little Redan, and, adjoining the harbour, a large stone barracks which had been converted into a strong point. Moreover, both flanks were unassailable, that on the Russian left rested on high ground abutting Careening Bay, a large wet ditch which could be protected by ships in the harbour, that on the Russian right being raked by guns from the Quarantine Fort.

All the strongpoints occupied commanding positions, having uninterrupted views to a distance of 2,000 yards, and even where the Russian defences were crossed by ravines, these ran towards the batteries and were, in consequence, enfiladed.

The allies then, with a force which was numerically little different from the defenders, and with little other than field pieces to protect them, would have to advance across open ground for upwards of a mile while exposed to galling fire from at least one hundred pieces of heavy artillery, exclusive of the fire which might come from ships moored in the harbour.(64)

Little could be done until the siege train had been landed and dragged into position, a protracted and difficult operation given that only one

or two ships could unload in Balaclava at a time and that each piece of ordnance had then to be dragged eight miles over steep and broken ground to the heights before Sebastopol. Moreover, the ground taken for the construction of emplacements presented every difficulty to the engineers, being so stony as to blunt such implements as they had at their disposal.

The French had taken up positions on the left, opposite the defensive wall which ran from the Central Bastion to the Flagstaff Battery, and on the extreme right, opposite the Little Redan and the Malakov, while the British had taken ground in the centre and were opposing the defensive wall between the Malakov and the Flagstaff battery, the centre of the position being opposite the Redan. The British attack was further divided into Left and Right Attacks, each attack being based upon a battery of long range Lancaster guns. As the building of the two batteries was supervised by two senior Royal Engineer officers the battery on the left eventually became known as Chapman's battery and that on the right as Gordon's battery.

The allied bombardment began on 17 October at about 6.30am. Firing continued throughout daylight hours from both British and French batteries until a powder magazine in the French lines exploded killing about 50 men. Thereafter the British gunners were left to continue without French support. The action had been planned as a combined naval and military operation, but on the day the fleet did not come into action until 3 pm. when both British and French ships engaged the stone forts at the entrance to Sebastopol harbour. During the remaining hours of daylight some superficial damage was inflicted on

the forts, but far more was suffered by the allied fleet. At the end of the first day a thousand Russians had been killed or wounded and some damaged had been inflicted on the defensive earthworks, but by the following morning the Russians had removed their dead, treated their wounded and, under the direction of the resourceful Todleben, repaired their defences. (65)

The bombardment continued during the hours of daylight for another week, at the end of which, despite the expenditure of no less than 46,537 rounds of ammunition, the surrender of Sebastopol seemed no nearer. (66)

Notwithstanding the bombardment, when men were required to spend long periods in the trenches, the British casualties for the month of October were comparatively light, 198 injured men being sent to Scutari, (67) but, if the numbers were small, the injuries inflicted by shot, shell and bullet were more serious than those seen forty years earlier. Ordnance was heavier, the conical bullet was gradually superceding the musket ball and, in consequence, men were now succumbing to wounds not previously seen by the medical staff.

Wounds inflicted by round shot were particularly destructive and soldiers so injured tended to develop shock (peripheral circulatory collapse) within a few hours, a condition almost invariably fatal and, even when the energy of the shot was almost expended, the missile was still capable of causing great damage as in the case of the unfortunate Private McGillan.

Pte. John McGillan, 77th. Regiment, age 39. Was struck on the hip by a spent round shot. Enormous swelling with much deformity and discolouration of the limb ensued almost immediately, extending from the hip to the knee. Fracture of the femur was diagnosed; but the swelling was too great for its exact site to be made out.

In a few days the swelling having somewhat subsided, a comminuted simple fracture of the shaft of the femur was discovered, but no fracture existed at the hip, where the shot had impinged. There was at first apparent lengthening of the limb, with a great tendency of the foot to roll inwards but the limb gradually shortened; callus was thrown out abundantly, and he recovered, and went to England on 30 November; the injured limb then being about one inch shorter than that of the opposite side. (68)

Wounds from shell fragments could be no less destructive but were frequently superficial, causing much laceration of skin and subcutaneous tissue, while conical bullets, fired from muzzle loading rifles rather than smooth bore muskets, had a greatly increased velocity and were less likely to be deflected by underlying tissue than the musket ball, as in the case of Private Dolan.

Pte. John Dolan, 18th Regiment was admitted to the regimental hospital an hour after being wounded by a conical bullet, which had passed through the right arm, entered the right side between the eighth and ninth ribs, traversed the right pleural cavity, and then appeared to have perforated the diaphragm. Its course could not be traced further but it was supposed to have lodged in or near the spine. Respiration 40 in a minute, difficult and accompanied by loud crepitant rales, pulse slow and weak, appearance exsanguine. The haemorrhage, externally from the wound in the side was considerable, and there appeared to be a large coagulum in right pleura. The external bleeding ceased soon after admission. It returned in the night and he lost a considerable quantity of blood. On the 5th he appeared better, but the pulse was weak and the expectoration bloody. On the 6th he became paraplegic, symptoms of double pleuro-pneumonia set in, and he died on the 10th.

Autopsy: The ball was traced between the eighth and ninth ribs of the right side, through the diaphragm, into the convex surface of the right lobe of the liver, which it perforated, then passed again through the diaphragm into the right pleura, thence through the body of the ninth dorsal vertebra, and was found lodged under the left pleura costalis, between the heads of the eighth and ninth ribs. The ball was deeply grooved by bone, but its general conical shape was preserved. (69)

Grape shot and fragments from fougasses, (small mines loaded with stones and debris) were also beginning to take a toll; while in the conditions which prevailed on the heights before Sebastopol, where the soil was thin and the underlying rock hard, men were frequently incapacitated by stones and fragments of rock sent up by exploding shells.

Unlike their predecessors on the Peninsula, injured soldiers now had, for the first time, the blessings of chloroform; nonetheless, this could only be administered in a crude form and being a rather toxic substance, was not without hazard, as the regimental surgeon of the 62nd Regiment discovered when he attempted the simplest of amputations.

Pte. Martin Hennessey, 62nd. Regiment, aged 32 years, a healthy soldier, having accidentally wounded one of his fingers by his musket going off, and the medical officer in charge considering it necessary to remove it, was brought under the influence of chloroform, but when he had inhaled about two drachms suddenly expired.

Post mortem examination revealed little beyond a fatty deposit of the left ventricle and some hypertrophy of the same.

If some of the wounds were different in character, the age old problem of sepsis remained, being particularly troublesome when the infection extended into bone.

William Burd, 10th. Hussars, received a compound and comminuted fracture from the kick of a horse. It was determined to save the limb, though the fracture was a bad one and the man was not in good health. He was forwarded to the Castle Hospital (Balaclava) where extensive swelling and inflammation followed, with the formation of large collections of imperfectly formed pus, among the muscles, both below the seat of injury and even in the ham and thigh, which required free and extensive incisions. He progressed favourably until November, when the abscesses had all but healed and union of the fracture had taken place. A small slough then formed on the outer side of the leg and when it separated was found to be more extensive in the deeper tissues than had been apparent. Low irritable fever now set in, preceded by rigours, and he died, worn out on 16 December. (70)

On 22 October, at the end of the first bombardment, Deputy Inspector General Dumbreck, the acting Principal Medical Officer in the Crimea pending Hall's return from Scutari, wrote to the Director General in St. James's to report on conditions in the army. His letter contained little which could have brought comfort to its reader. It was, he wrote, painful to contemplate the way in which the army was melting away. Cholera was still prevalent and the men were all sickly, which was not to be wondered at as they came to the Crimea in a broken down and weakly state and were now having to contend with the incessant toil of the siege operations with little rest. Moreover, since the beginning of the month, five medical officers had died and many more were sickly. Nevertheless, medical arrangements to meet a large influx of wounded were in a mature state and ships were ready with comforts, medicines and appliances. (71)

Dr. Dumbreck's medical arrangements were to be put to the test rather sooner than he had anticipated for within three days of his writing to Smith the Russians mounted an attack on the British camps at Balaklava and Kadikoi.

6. The cavalry battles at Balaklava on 25 October 1854.

After his defeat at the river Alma, Prince Menschikov had withdrawn his troops from Sebastopol and marched towards the Mackenzie Heights, leaving the defence of the town to the sailors of the Black Sea fleet. During the first three weeks of October, reinforcements were sent to him from the interior until an army of 65,000 was camped between the Mackenzie Heights, eight miles north east of Sebastopol and the Baidar

Valley, eight miles to the south east. Menschikov was now being pressed by the Tsar to make some move against the allies. Somewhat reluctantly he decided to attack the British garrison at Balaclava and the cavalry camp at Kadikoi, one mile to its north.

Balaclava had two systems of defence, an inner line of earthworks running in a semi-circle from Mount Spiliia on the coast to Kadikoi, and an outer line of six redoubts sited on, or adjacent to, the Causeway Heights, which ran east to west across the plain of Balaclava and divided it into the North and South Valleys. Of the six redoubts, only the four nearest to the village of Kamara were manned, each being occupied by 250 Turks equipped with small arms and a few twelve pounders on loan from the Royal Artillery. Because the greater part of the British expeditionary force was committed to the siege of Sebastopol, eight miles to the north, the garrison at Balaclava comprised no more than 650 men of the 93rd. (Sutherland) Highlanders, 1,100 Marines and 1,000 Turks.(72)

Menschikov's troops moved before dawn on 25 October, one column of infantry, with cavalry and artillery in support, advancing from the Baidar Valley towards Kamara and the 1st.Redoubt; a second column marching from Tchorgun towards the 2nd.Redoubt; and a third crossing the Trakir Bridge and moving on the 3rd.Redoubt. To guard against an attack in the flank from the French troops on the Sapoune Ridge, a fourth column, 5,000 strong, marched from the valley of the Tchernya river, skirted the base of the ridge, and took possession of the Fedhukine Hills.

By 7.30 am. the Russians had captured the 1st.Redoubt. Soon afterwards the Turks in the other three took fright, abandoned their positions and ran back to Balaclava. At 8 am., alerted by the signs of an impending crisis, Lord Raglan had instructed the 1st. and 4th. Divisions to march the six miles from the British camp on the Heights to Balaclava, but as this manoeuvre would take several hours to accomplish, the defence of Balaclava and Kadikoi rested with the cavalry division, drawn up at the western end of the South Valley; the 93rd.Regiment, deployed on rising ground in front of Kadikoi; and the Marines stationed behind the inner defences at Kadikoi.(73)

As the Russian cavalry rode westwards along the North Valley, Lord Lucan ordered the Heavy Brigade to ride eastwards along the South Valley. Thus, the two columns were converging whilst screened from each other by the Causeway Heights. When the Russians drew level with the 4th.Redoubt they came under fire from allied batteries on the Sapoune Ridge and wishing to find cover crossed the causeway and trotted into the South Valley less than 700 yards from the Scots Greys, the Inniskilling Dragoons, and the 5th.Dragon Guards.

On catching sight of the British heavy cavalry the Russians first slowed to a walk and then halted. General Scarlett, commanding the British cavalry, now seized the initiative; waiting just long enough for his men to deploy he led the 1st. and 2nd. squadrons of the Scots Greys and the 2nd.squadron of the Iniskillings into the charge. Within minutes they were joined first by the 1st. squadron of the 6th. Iniskillings, the 5th.Dragon Guards and then by the 4th.Dragon Guards, who rode parallel to the main body and then swung into the right flank of the Russians. As the mass of men and horses began to

wheel the Royals, arriving minutes later, struck the final blow. The Russians gave way and began retreating across the causeway back into the North Valley. In less than five minutes the 600 men of the Heavy Brigade had driven off a force of 2,000 Russian horsemen.(74)

On hearing about the Russian threat to Balaclava, Lord Raglan and his staff had ridden to a position on the Sapoune Ridge from which they could obtain a clear view of the North and South Valleys. Lord Raglan had witnessed the action of the Heavy Brigade and could see the Russians retreating into the North Valley. He was now concerned to take advantage of Scarlett's success but, since neither the 1st. or the 4th. Divisions had arrived, had few troops upon which he could call. Accordingly he decided to use Lord Lucan's cavalry division for a second time and issued the first of the two orders which were to bring about the destruction of the Light Brigade.

The cavalry to advance and take advantage of every opportunity to recover the Heights. They will be supported by infantry which has been ordered to advance on two fronts.

Lord Lucan understood Lord Raglan to mean that his men would support the infantry, and took no action for almost an hour, while Lord Raglan and his staff watched with mounting impatience from the Sapoune Ridge. Lord Raglan was then told that the Russians were bringing up teams of horses in order to tow away the British twelve pounders captured earlier in the day and issued his second order, which as written down by General Airey read,

Lord Raglan wishes the cavalry to advance rapidly to the front. Follow the enemy and try and prevent the enemy carrying away the guns. Troop Horse Artillery may accompany. French cavalry is on your left. Immediate. (75)

The message was carried to Lucan by Airey's aide-de-camp, Captain Louis Nolan, who, disdaining the longer route, rode directly down the escarpment to the plain below. From his position in the South Valley, 700 feet below Lord Raglan, Lord Lucan could not see what was plainly visible above, and on receiving the message from Nolan expressed the opinion that an attack was both useless and dangerous. Nolan, in a state of heightened emotion, repeated that it was Lord Raglan's wish that the cavalry attack immediately. When Lucan, in some bewilderment, questioned the direction of the attack, Nolan pointed to the far end of the North Valley saying, " There, my Lord, is your enemy. There are the guns."

Lucan now rode towards Lord Cardigan and gave him the order to advance. The light Brigade was to attack the Don Cossack field battery at the far end of the North Valley. Cardigan protested that the guns were flanked on both sides by Russian infantry and Russian guns, to which Lucan replied that he could not help it since it was Lord Raglan's positive order that the Light Brigade attack immediately.

Cardigan made no further demur and putting himself at the head of his men gave the order for the Brigade to advance. As it moved off, Nolan appeared to see that a mistake was about to be made, and spurring his horse, crossed in front of the brigade in an effort to attract Cardigan's attention. At that moment he was struck in the chest by a fragment of shell and died instantly, leaving the Light Brigade to ride down the North Valley to its destruction. (76)

When, a few minutes later, Lord Raglan saw the remnants of the Brigade riding back up the valley towards Kadikoi, he descended from Sapoune Ridge to where Lord Lucan was waiting on the plain of Balaclava and immediately reproached him for having lost the Light Brigade, a charge which Lucan strenuously denied. " I do not," he wrote that night, " intend to bear the smallest particle of responsibility. I gave the order to charge under what I considered a most imperious necessity." (77)

It was, wrote Rudolph de Sallis,

a most miserably dreadful mistaken affair. On we went all of us knowing that it was certain destruction as well as quite unavailing. The leading line of light cavalry attacked and carried the guns in a moment, but as they did so 20 other cannon from the flank batteries and an infantry regiment with minies poured destruction upon them. The 8th. and the 4th. formed the second line and we were ordered to support which we did through the same ordeal. We could not bring back the guns and every moment were losing fearful numbers. The colonel and I put ourselves at the head of the men and ordering them to ride at their outside speed we prepared to charge at 400 Russian cavalry who had barred our line of retreat. How we escaped unhurt I do not know, I suppose the determination of lost men. (78)

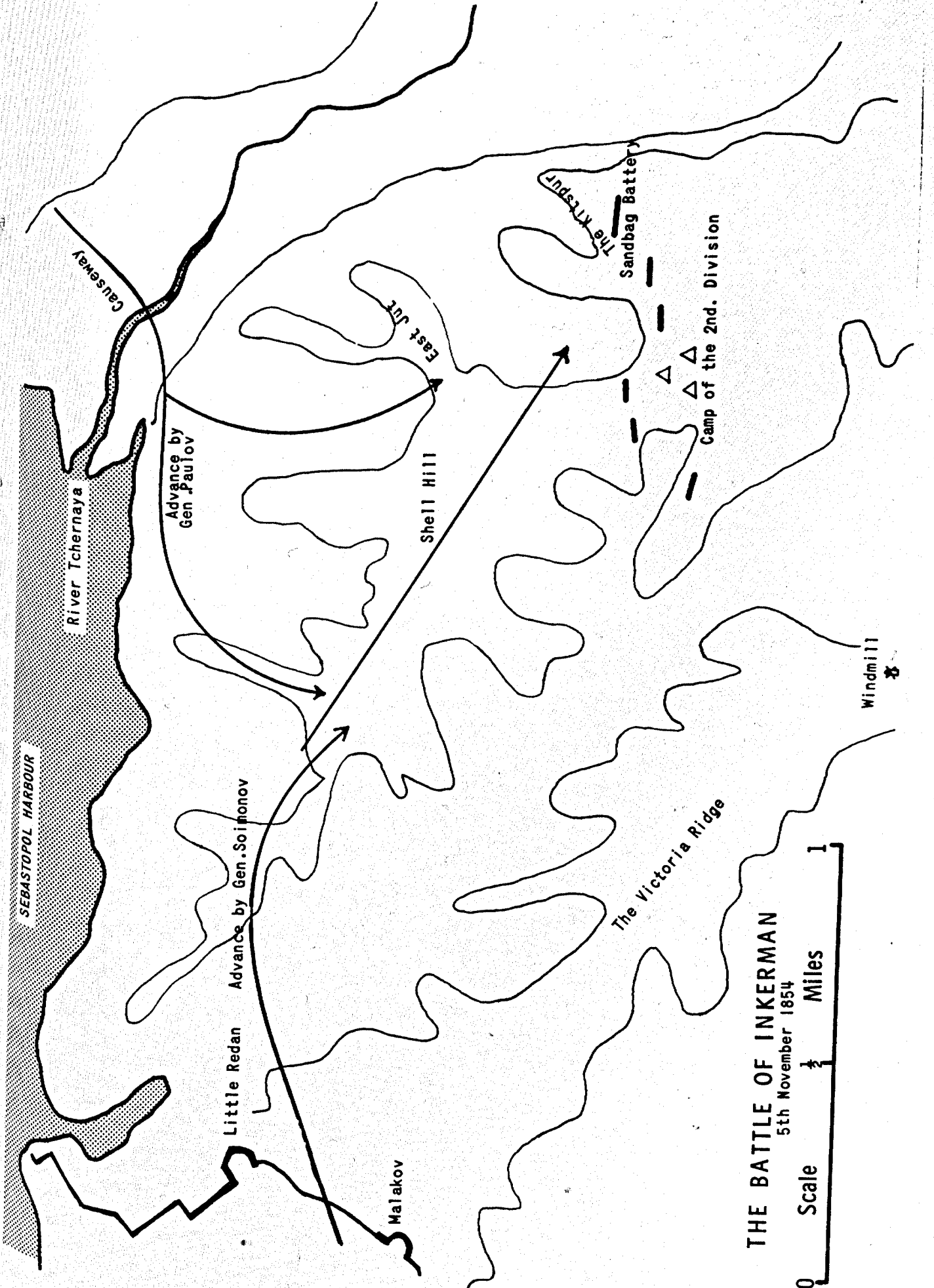
Of the 673 officers and men who took part in the charge, 156 were killed and 122 more were injured, the loss of horses being even greater. In addition to the injuries inflicted by shot and shell, many more were inflicted by sabre and lance, injuries which were alarming at first sight but which were generally less serious than those resulting from high explosive. All the wounded within reach were removed from the valley by

the twelve ambulance waggons sent from Varna, the first time that the vehicles had been used, and, as doubts about the safety of Balaclava were still being entertained, the more seriously injured were promptly sent off to Scutari.

Dr. Hall had returned from Scutari in time to witness the destruction of the Light Brigade and two days later wrote an account of the engagement for the Director General. He also took the opportunity of reporting on the health of the army in the Crimea. In three days he had sent more than 800 men to Scutari. The cholera was lessening in intensity but as the siege continued fever and dysentery were becoming more troublesome. The want of fresh vegetables was much felt and he had endeavoured to obtain a supply of potatoes and onions. The ambulance waggons had performed admirably at Balaclava but Mr. Guthrie's two wheeled carts were an utter failure, being far too unstable. He had warned Menzies in Scutari to expect another 1,000 casualties and had applied to have the less seriously wounded sent to Malta. (79)

7. The battle of Inkerman, 5 November 1854.

By the end of October the allied siege works ran in a semi-circle around the southern and south eastern aspects of Sebastopol but did not extend far enough to the north east to prevent the Russians sending men and materials into the town via the post-road which ran along the Tchernya valley. The British lines extended from the Great Ravine in the centre to the Inkerman ridge on the extreme right; the camps of the Guards Brigade, the 2nd., Light, 3rd., and 4th. Divisions being pitched to the rear along the Sapoune Ridge. While the camps of the other Divisions were shielded by the Sapoune Escarpment, that of the



SEVASTOPOL HARBOUR

River Tchernaya

Causeway

Advance by
Gen. Paulov

Little Redan Advance by Gen. Soimonov

Malakov

Shell Hill

East Out

The Victoria Ridge

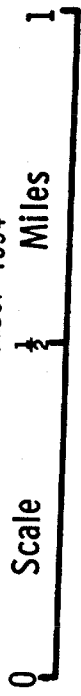
The Kopsur
Sandbag Battery

Camp of the 2nd. Division

Windmill

THE BATTLE OF INKERMEN

5th November 1854



2nd.Division was vulnerable to an attack mounted across the Inkerman Ridge.

The Inkerman Ridge was an irregularly shaped tract of land running south-east from the Careening Creek in Sebastopol harbour to the northern extremity of the Sapoune Ridge, a distance of about two-and-a-half miles. To the south it was separated from the Victoria Ridge by the Careening Ravine and its two main branches, the Mikriakov Gulley and the Wellway, while to the north it fell away steeply into the Tchernaya valley. Varying in width from less than 250 yards to more than half a mile, it stood 400 feet above sea level and was topped by two peaks, the Home Ridge to the east and Shell Hill to the west.(80)

By the beginning of November the numbers of Russian troops in the Crimea exceeded 100,000, the various divisions being concentrated at three sites; on the Mackenzie Heights; at Tchorgun; and within Sebastopol. Urged on by the Tsar, Prince Menschikov now agreed, somewhat reluctantly, to attack the camp of the British 2nd.Division.

His plan of attack was far from simple and would require a great deal of coordination. On the morning of 5 November 19,000 men and 38 guns, under the command of General Soimonov, would leave Sebastopol through the Karabelnaya suburb, cross the Careening Ravine, and climb Shell Ridge thus gaining access to the Inkerman Ridge. At the same time 16,000 men and 98 guns, under the command of General Pavlov, would march from the Mackenzie Heights, cross the causeway spanning the Tchernaya valley, and climb to the Inkerman Ridge via the Volovia and Quarry Ravines. Once in position the two columns would link up under the command of General Danneberg and advance on Home Ridge. To prevent

Bosquet's men, stationed on the Sapoune Ridge, and the other British Divisions from going to the aid of the 2nd. Division, 22,000 men and 88 guns, commanded by Prince Gorschakov, would threaten to attack from the Balaclava plain, while from within Sebastopol, General Timoniev would lead a diversionary attack against the French siege works to the south west. In the event the plan was too complicated and presented almost insuperable problems of coordination to his divisional commanders.

Soimonov's men began to advance before dawn, and by 6 am. had climbed Shell Hill, from where they began shelling the British camp. As the alarm was raised the men of the 2nd. Division hurried towards Home Ridge, hindered by a fog which reduced visibility to less than 50 yards. At the sound of the firing the Grenadier and Scots Fusilier Guards, camped to the rear, marched towards the firing. Once at the camp, the two Guards regiments marched first to the Home Ridge and then 700 yards north to the Sandbag Battery on the Kitspur, where they were exposed to attack from the Russian columns ascending the Quarry Ravine. For the next five hours the Guards fought to prevent Pavlov's men from capturing the battery, while on their left the men of the 2nd. Division fought ferociously to prevent the Ridge from falling into the hands of the Russians. By 9 am. the Scots Fusiliers and Grenadiers were joined by the Coldstream and by 11 am. British and French reinforcements were arriving in large numbers from the Sapoune Ridge. As the allied batteries came into action the Russians began to withdraw. Six regiments of Infantry and three regiments of Guards had withstood the attack of 35,000 Russians for upwards of five hours.

Three days after the battle the dead were still being buried. Lord Raglan suggested that a truce be declared and that Russian burial parties be sent to assist but Prince Menschikov in declining the offer took the view that the disposal of the dead was by custom a duty of the victors. Thus the allies were left to bury 4,000 Russians. (84)

The scenes in the hospitals were hardly less gruesome, wrote Prince Edward of Saxe Weimar, and it was " A horrid sight to see the bodies of the men who had died in the night, stretched out before the tents, and the heaps of arms and legs, the latter with the trousers and boots still on." (85)

Dr Hall took a more objective view. The wounds had been less serious than at the Alma and fewer primary operations had been performed. The wounded had been collected early and had been attended to expeditiously. The ambulance waggons had been of great use in transporting the wounded to Balaclava, a distance too great for the stretcher bearers, and his officers had been assisted by the French who had sent a brigade of their mule transport.

The Sidney had left Balaclava with 170 wounded in the care of Surgeons Meddoes, Sheehy and Evans; as had the Arabia carrying 190 sick and 40 wounded, Surgeons Gorringe and Lougham attending; the Talavera was to sail shortly with 170 sick and wounded in the charge of Surgeons Mackey and Jephson; 250 sick and wounded had been embarked on the Mauritius and were in the care of Surgeons Furlonge and Humfrey; 200 sick and wounded were on board the Edenvale as were Surgeons Young and Stuart and the Colombo was to take another 250 and Surgeons Llewellyn, Grylls and Hooper had been detailed for duty; The Medway was to take

was to take 350 sick and wounded and the Andes another 280. The Victoria would then carry the remainder and would bring also the Russian wounded. (86)

When all had been completed Dr. Hall wrote to the Commander-in-Chief to draw his attention to the sterling service rendered by the medical department. In return he was reprimanded for asking the French for lint, a charge which was untrue but one which Lord Raglan seemed determined to believe. (87)

As the days passed a great gloom seemed to descend over the British camp. General De Lacey Evans suggested that the siege should be abandoned; a number of officers sent in their papers and one, Lord George Paget resigned as Colonel of the 4th. Light Dragoons, an action generally deplored by the other regimental colonels.

We have boasted too much, wrote Prince Edward of Saxe Weimar, when we said that the place would fall after three days bombardment. So much was expected from the Lancasters (siege guns) which turned out to be failures. The Siege Train, which has been cried up so much in the Papers has certainly not come up to half what was expected of it. (88)

And then, as if the ordinary hardships of siege life were not enough, at about 6 am. on 14 November the worst storm in living memory struck the Crimean Peninsula devastating the allied camps; within minutes the air was filled with tents, blankets, chairs and tables. The roofs of the commissariat sheds were blown off, men and horses were knocked over and the neat rows of white tents disappeared leaving only rolls of discoloured canvas, but the discomforts of the soldiers on the heights above Sebastopol were as nothing in comparison with the sufferings

of the sailors trapped in the narrow harbour of Balaclava, where almost every ship was sunk and three hundred men were drowned. Outside the harbour the steamship Prince, 2,700 tons, was lost with all hands and carried with it to the bottom all the winter clothing sent out for use by the expeditionary force.

As night fell the men scraped the mud and snow from their clothing and began to pitch the tents, their movements slow and clumsy in the intense cold. In the yard of Lord Raglan's farmhouse men were crammed in every available hut and stable, cold, wet and hungry. Few could sleep and most huddled together for warmth. By the middle of the night the storm began to abate and as the sound of the wind lessened another sound became audible. Far from being defeated and as if to mock them in their misery, the Russians were attacking the French positions on the heights. (89)

8. Miss Nightingale in Scutari, November 1854.

Miss Nightingale, Mr. and Mrs. Bracebridge, and the mixed party of nurses and nuns left London for Scutari on 21 October. Landing in Boulogne they were given an ovation by the townsfolk, many of whom had husbands and sons serving in the French army. Hospitality for the party was provided at a local hotel but a sour note was sounded when the ladies refused to sit with the hired nurses. Scorning such distinctions of class Miss Nightingale waited on the nurses and then ate with them. Leaving Boulogne they travelled to Marseilles and embarked on the Vectis, 'a small fast mail packet, on 27 October. (90)

The day of the embarkation was bright and sunny but it was a Friday and the superstitious amongst the party later attributed the many discomforts of the voyage to this fact. (91) Three days out the vessel ran into heavy weather and most of the party were prostrated by seasickness. Some became distraught at the vessel's pitching and rolling and one, Mrs. Clarke, demanded " that the ship be stopped for fear all died of terror." (92)

They caught their first sight of Turkey on 3 November and their first view of the great building which had become the Barrack Hospital on the following morning when the Vectis anchored off the Golden Horn.

Rowed ashore in caiques they were met by Menzies and the military commandant, Major Sillery, and shown to their quarters, five cramped rooms in one of the corner turrets, made all the more depressing by the sight of the body of a Russian general awaiting burial. (93)

Conscious of the difficulties which could arise between the nurses and the doctors Miss Nightingale was careful not to antagonise them by exceeding her authority. Allocating twenty-eight nurses to the Barrack Hospital and another ten to the General Hospital, a quarter of a mile distant, she waited to be asked by the medical staff to assist on the wards instructing her nurses that they were only to attend to patients if invited so to do. For some days the doctors seemed aloof and the nurses were under-employed, though some attended patients on the cholera wards, sad depressing places occupied by men, broken in health, who seemed to think they were dying without glory, (94) until suddenly

the news came of the imminent arrival of 500 sick and wounded from the Crimea after the battle of Inkerman. All were once occupied with stuffing makeshift palliases with straw and making such provision as was possible for the influx of new patients.

What a scene, Dragoons, Hussars, Lancers, Riflemen, Generals and Common soldiers all mixed up together. When they land they are generally in rags and glad of anything to cover them. Those not able to walk are carried on stretchers by four soldiers. Those able to walk look worse, their clothes in rags, hats and helmets smashed, that once looked so fine, faces and arms bandaged, not washed for weeks before the battle, dragging their weary limbs to die in peace. (95)

Despite the unremitting toil of the doctors, conditions in the Barrack Hospital had not improved in the weeks which had passed since the publication of Chenery's dispatches and though Menzies had made repeated efforts to secure the return of the hospital stores from Bulgaria these were still lying on the quayside at Varna. (96) Thus, hundreds of patients were without beds and clean linen, were unwashed and unshaven, were denied the food they needed and were even without receptacles in which to relieve themselves when stricken with the colic of dysentery or cholera. Moreover, Smith's apprehensions about the inferior quality of hospital orderlies who had been drafted unwillingly from regiments, or who had volunteered for work as orderlies from motives other than a wish to serve the sick, proved to be well founded, as Nurse Sarah Terrot recorded in her diary.

Daily we saw men carried in whose state of filth no words can describe, and with death written on their discoloured faces, it was heart rending to see their imploring countenances as they were carried from ward to ward seeking in vain a place to lie down. They seemed to entreat to be laid down anywhere to die in peace. I have seen their sad eyes look imploring at the orderlies, as if to say,

The conduct of the orderlies, considering they were fellow soldiers of the poor sufferers, was most unfeeling and inconsistent with the general character of the soldiers, and certainly not all orderlies are selfish and heartless, but on the whole they seemed to be inferior in character to the other soldiers. I think the finer and nobler men scorned the inactivity and safety of hospital life, and preferred more the dangers and hardships of the camp before Sebastopol to such women's work as nursing and sweeping, so that they were rather the dregs of the army who became orderlies and their motive selfish safety; they had no real love for their duty. (97)

But it was now, just when the administrative system of the hospital seemed on the point of collapse, that Miss Nightingale began to exert her considerable influence. Deciding that the first need was to clean the wards and corridors in which the patients were lying, she went in search of scrubbing brushes.

This morning I foraged in the Purveyor's stores, a cruise I now make daily as the only way of getting things. No brushes; no mops; no plates; no wooden trays; no slippers; no shoe brushes; no knives or forks; no scissors, for cutting the men's hair which is literally alive; no basins; no bowls; no chloride of lime. (98)

Undeterred, she sent MacDonald, the commissioner of the Time's fund into Constantinople with orders to buy as many as possible from whatever sources of supply that could be found. Then, once the cleaning had begun she insisted that the orderlies emptied the overflowing urinal tubs, standing by each one patiently but obstinately, often for as long as an hour, until they were shamed into carrying out her instructions.

Next, she turned her attention both to the patient's clothing and to their diets. Renting a house adjacent to the hospital, she persuaded the Royal Engineers to install copper boilers and engaged a number of the soldiers' wives as washerwomen. Then, after buying large quantities of provisions, she began to prepare nourishing but easily digested meals which she gave to the patients in place of the unappetising and unwholesome food supplied by the purveyors.

As the weeks passed it seemed that she had become the unofficial purveyor supplying, on any requisition signed by a medical officer, articles which were needed for the patients but which were unobtainable from official sources. Where the purveyors were required to wait for the arrival of stores from the United Kingdom she was free to use the money in the Times's fund to buy whatever was needed in Consantinople and had become, in her own words,

A general dealer in socks, shirts, knives, forks, wooden spoons, tin baths, tables and forms, cabbages and carrots, operating tables, towels, soap, smalltooth combs, precipitate for destroying lice, scissors, beds, bed pans and stump pillows. (99)

As her reputation grew the opposition from hospital officials lessened but the difficulties with her own nurses increased.

Mrs. Roberts from St. Thomas's was a tower of strength, as was Mrs. Drake from St. John's House, but most of the other nurses were unfitted for their duties and one, being found drunk on duty, was sent home in disgrace. The nuns, she found, were more compassionate but most were unable to comply with her high standards of discipline.

Matters came to a head in early December when Sister Elizabeth of the Sellonite order, angered at the continued suffering of the men, wrote to relatives in England describing their plight and accusing the medical authorities of a callous indifference. Unhappily for her, the letter was passed to Delane, editor of the Times, who seized upon it to use in his campaign against the army medical department. Its publication on 8 December was a serious embarrassment to Miss Nightingale at a time when she was winning acceptance from the medical staff. Later the propriety of Sister Elizabeth's conduct was investigated by three senior doctors who found that she had represented the total deaths for a division of the hospital as if they had occurred on a single ward. She had also described conditions on wards of which she had no direct experience. Given such a breach of discipline it was inevitable that she would be asked to resign, though, as one of her colleagues recorded, her departure was a great loss to the patients.

Sister Elizabeth's removal we all felt as at once a grief and an insult. Loving and admiring her at all times, I loved and admired her most for the Christian temper she showed under reproach. We were indignant but she refused to join in blaming anyone. She only regretted leaving her patients, and having caused trouble and annoyance to Miss Nightingale. (100)

As if her embarrassment over Sister Elizabeth was not enough, on 14 December, Miss Nightingale found out that forty-six nurses, under the leadership of the neurotic and emotional Mary Stanley, were due in Scutari on the following day. Moreover, it seemed that they had been assigned to Dr. Cumming and were not to be under her control. She had been appointed head nurse in Scutari by Sidney Herbert and had now been

passed over. She had doubted the wisdom of bringing thirty-eight nurses in the first place, to send another forty-six seemed the height of folly. Believing herself betrayed by Sidney Herbert, she wrote to express her anger and disappointment. (101)

When I came out here as your Supt. it was with the distinct understanding that nurses were to be sent here at my requisition only. You came to me in great distress and told me you were unable to find any other person for the office and that, if I failed you, the scheme would fail.

I sacrificed my own judgement and went out with forty females well knowing that half that number would be more efficient and less trouble.

Experience has justified my foreboding. But I have toiled my way into the confidence of the medical men. I have, by incessant vigilance, day and night, introduced something like order into the disorderly operations of these women. And the plan may be said to have succeeded in some measure as it stands.

At this point of affairs there arrives at no one's requisition, a fresh batch of women, raising our number to eighty-four.

You must feel I ought to resign, where conditions are imposed upon me which render the object for which I am employed unattainable, I only remain at my post until I have provided in some measure for these poor wanderers. You will have to consider where they are to be employed; at Malta, Therapia or elsewhere or whether they return to England and you will appoint a Superintendant in my place until which time I will continue to discharge my duties as well as I can.

In order to make in clear to Herbert that she had not written in haste she wrote on the foot of the letter; " Written 15 December. Posted 18 December."

Miss Stanley's party was made up from nine ladies, fifteen Irish nuns and their superior, Mother Bridgeman, and twenty-two hired nurses. It was accompanied by Dr. Meyer, a physician, and the Honorable Jocene Percy, a young M.P. who wished to serve Miss Nightingale and who hoped that she would accept him on his arrival in Scutari.

Miss Nightingale's fears about the high proportion of Roman Catholics in the party were not without foundation. Her own group of nurses had contained fewer but she had still been denounced as a Anglican Papist. It had been alleged that she was involved in a Jesuit conspiracy and one parson had gone so far as to advise his parishioners not to send contributions to support a party composed of female ecclesiastics and Romish nuns. (102) Moreover, time was to show that Miss Stanley had chosen her nurses badly, for once in Scutari twenty of the party made it clear that they were determined to act as assistant ecclesiastics while the fifteen Irish nuns refused to recognise any authority save that of Mother Bridgeman.

The journey to Scutari proved a disappointment to the emotional Miss Stanley. The ladies made no secret of their dislike of the hired nurses and were shocked by the bad language which they seemed to use on all occasions. Once on the train the nurses drank too much and

then behaved badly while Miss Stanley spent far more money on food and accommodation than was prudent, given her limited resources.

Once in Scutari, instead of receiving a warm welcome from Miss Nightingale in person, she was met by her emissary, Mr. Bracebridge, who came on board to tell her that there was no room for her party in the British military hospitals. Dr. Meyer and Mr. Percy left the ship and went in search of Dr. Cumming, newly appointed Principal Medical Officer, who was no more welcoming. He had not been told of their arrival and could offer employment at neither the Barrack or the General Hospital. They went next to Miss Nightingale who, in a cold fury, told them that she would accept no responsibility for their presence in Scutari. Downcast, they sought out Lord William Paulet, the new military commandant, who could only suggest that they travel to Therapia where Lord Stratford was willing to accommodate them in a house belonging to the British embassy. (103)

A week later Miss Stanley approached Miss Nightingale and suggested that ten of the protestants in her party should become assistants to the Anglican chaplain and ten of the catholics should assist Father Michael Cuffe, the catholic chaplain. Miss Nightingale immediately rejected such a suggestion and read out a copy of the letter which she had written to Sidney Herbert on 15 December. She then offered to lend Miss Stanley £90 to cover her immediate expenses. The two ladies parted coldly and later the same day Miss Stanley wrote to Elizabeth Herbert explaining what had taken place. It had taken "all her love not to be hurt by Flo," adding somewhat ruefully that they need not be anxious about Florence, she had never been in greater force.

The two ladies met again on 24 December when Miss Nightingale suggested a compromise. A proportion of the Irish nuns could be taken into the Barrack Hospital if the same proportion of catholic nuns, already employed in the hospital were sent home. When the compromise suggested by Miss Nightingale became known it enraged both protestants and catholics. Mother Bridgeman would not permit her nuns to enter the Barrack Hospital unless she accompanied them. A protestant chaplain on the staff of the hospital wrote to the Duke of Newcastle denouncing one of the nuns as an unbeliever. An Irish nun baptised a dying soldier and was sent home by Miss Nightingale. It seemed that the experiment of introducing nurses into the British military hospitals might be threatened by religious controversy rather than opposition from the medical staff. Yet much had been achieved by both doctors and nurses. Miss Nightingale's abilities as an organizer had begun to make inroads into the chaos. The ineffective Dr.Menzies had been replaced by a stern disciplinarian, Dr.Cumming, previously a member of the Hospital Commission. The ageing Purveyor Ward had been superseded by the younger Purveyor Wreford, who, after some initial rebelliousness, had accepted the need for more cooperation with the doctors. Supplies were beginning to arrive from the United Kingdom and Admiral Boxer had finally returned the hospital stores from Varna. Mr.Benson Maxwell, senior Hospital Commissioner, wrote privately to Sidney Herbert on 15 December to report on the state of the hospitals in Scutari and was more charitable towards the medical department than might have been expected, given the unfavourable publicity of the previous three months.(104)

We have been engaged in examining a number of surgeons and dispensers upon the state of things in the hospital at the time of the battle of Alma and ever since, inquiring especially into the alleged want of linen, lint, bandages and other surgical materials and appliances. Unless all these gentlemen have conspired to deceive us, there can be no question as to the falsehood of the statements which were circulated on the subject. One dispenser told me that he distinctly recollected having counted the packages of Taylor's Lint the day before the first wounded had arrived and found that there were 420, each packet weighing a pound. Besides these, there were in the store, some boxes of lint, each containing 25 lbs., but these he did not count.

Upon the whole it gives me great pleasure to be able to state that in proportion as I advance in my task, the case against the hospital appears weaker and weaker. When I say the hospital I mean the hospital system and the authorities at home. At first, while I was a mere observer, I confess things looked very black. Confusion here, dirt there, the want of common necessities elsewhere. But stupidity and neglect of agents will be found the cause of these defects rather than the want of foresight at home. At the same time there are some things which are radically defective. The want of shirts and socks as part of regular hospital clothing is to be imputed to the regulations of the service which does not include these articles. The obvious inefficiency of the Commandant's staff, and the want of a good system for the transport of the sick and wounded are all serious defects which cannot be cured on the spot.

But the trumpery difficulties about washing linen, cooking rations and all such matters are mere local mismanagement. To the same mismanagement is to be attributed the constant reports that the stores are wanting in almost every requisite. The day before yesterday I met Mr. Bracebridge followed by an orderly who was carrying a small collection of old linen, to which Mr. B. triumphantly directed my attention. He declared it to be a great prize which he had discovered in a corner of the Purveyor's store. (where it should not have been) I assured him that if he would walk with me to the Apothecary's store I would show him heaps of old linen, which I myself had seen, to say nothing of the array of lint enough to dress the wounds of the entire British army.

I met Mr.S.G.Osborne a couple of days ago and had a long conversation with him and in the course of this he told me what he called the last good joke against the Director General, Dr.Smith, which was that Dr.Smith had written recently recommending the trial of Sesquichloride of iron for hospital gangrene, but that he had never sent any of the medicine mentioned. I went to the apothecary's store and saw with my own eyes two enormous bottles of it. All these idle rumours have a foundation and it is simply this. Each hospital has a surgery which draws its supplies from the apothecary's store. If any article is required by a surgeon a written requisition is sent by him to the surgery. If the article does not happen to be in the surgery, the dispenser sends back word that there is none, and the Commandant then goes about trumpeting to Mr.Osborne and others that such and such a thing is not to be had, although it may be lying in a store a 100 yards from him. This is partly the ignorance of those who do not understand the real meaning of the message they receive from the surgery and partly to the negligence of the dispenser who does not instantly send an orderly for the requisite article from the proper quarter.

I believe this will explain all the stories about the wants and half the horrors of the transport ships and the field hospitals in the Crimea may be attributed to this want.

I am happy to say that I have a pair of honest and efficient colleagues. Writing as I am permitted to do, without reserve and in confidence, I will confess that I was at first inclined to suspect the impartiality of Dr.Cumming but all my doubts have vanished. I don't think he's a great reformer, he has lived too long under the existing regime to believe it susceptible of much improvement. He generally meets any suggestion of mine of this nature by shewing how easily the evil which arises might be obviated by men of sense and exertion. I have difficulty in making him feel that these qualities are valuable only to make a bad system work well, but that in a good system it should work well though every man engaged in it was a blockhead.

He is a sensible man however and decidedly a tartar. He has been so long accustomed to deal with young men under his orders that it took some days before I satisfied as to the true nature of our relative positions but since he has learned this he has taken to his task more kindly and more resolutely. He will not be popular, for his manner is brusque, but he will keep a tight hand on everything. My other colleague, Dr.Laing, is a second class staff surgeon who came out with us on the Vectis and whom, from the beginning, I believed was both shrewd and straightforward. He is a most valuable addition to our body for he knows the details of the work well and is not wedded to it. He and I live together and we discuss the points that occur to us. It was he who suggested to Dr.Cumming the establishment of washing machines and also recommended a plan which I believe the Commandant contemplates adopting viz. to make the convalescent hulk the receptacle of all men invalided and ready to be transported to Malta and England.

Despite the few words of comfort in Mr.Benson's letter it must have seemed to the duke and Mr.Herbert that their troubles with the expeditionary forced were never ending, for if conditions in Scutari were beginning to improve, conditions in the Crimea had been steadily going from bad to worse since the battle of Inkerman.

9. The Crimean winter of 1854-55.

Three days after the great storm, Admiral Dundas, on board his flagship, H.M.S.Britannia, wrote to the Secretary to the Admiralty furnishing details of the losses. Of the ships standing off the Katscha when the storm struck, five British transports, The Pyrenees, Ganges, Rodswell, Lord Raglan and Tyrone had been lost, as had eight foreign ships, and considerable damage had been inflicted on H.M.Ships, Sampson, Terrible, Algiers, Furious, London and Trafalgar.(105) The losses in Balaclava harbour had been even greater; seven British transports, the Prince, Resolute, Kenilworth, Wildwave, Progress, Wanderer and Malta had been driven onto the rocks and the Victoria and the Ardent had lost their rudders.

The harbour was full of crippled vessels and as only one steam tug was seaworthy, it was several weeks before its wharves could be used to unload incoming vessels. (106)

Following the great storm the weather broke and it rained incessantly for the next month turning Balaclava and the British camp on the heights into a sea of mud. The few roads from the harbour to the camp were soon impassable to even the lightest of wheeled vehicles and, as the horses were dying in great numbers from starvation, the difficulties of transporting both supplies and ammunition threatened the continuation of the siege. With the interruption in supplies the plight of the common soldiers now became extreme.

Our men are being worked and starved to death. Their feeble stomachs reject the rations of greasy pork and stringy beef, and we never have got the sugar, rice and vegetables to which we are entitled. The coffee is issued green and we have no fuel for cooking and no forage for our animals. All the regiments not incapacitated by sickness went into the trenches last night; returning this morning, they went at once and without breakfast to Balaclava on fatigue to carry bags of biscuits on their backs; from whence they are now returning just in time to go into the trenches again tonight but too late to search about for brushwood, light fires, roast and grind coffee and boil their pork. Take with this that they are usually wet through, that their clothes are torn to pieces and their wretched government boots soleless and we have sufficient reason for the death rate. (107)

In an effort to maintain some semblance of a barrage against the Russian defences the men were also used in great numbers to carry shot to the British batteries, each man carrying a 24 or 32 lb shot in a sandbag but, while this solved the problem of transporting rounds for the lighter artillery pieces, the problem of transporting the heavier ammunition used in the 13 inch siege mortars was not overcome until the Balaclava railway was opened in late March. (108)

To add to the sufferings of the troops, by December cholera had broken out again and was particularly destructive to the drafts of soldiers newly arrived from the United Kingdom. (109) A third of the army was sick; the soldiers were dirty, half clad, and covered in vermin. Their duties were severe and constant, they were irregularly fed and their bell tents provided little shelter from the Crimean winter. In the view of Assistant Surgeon Wrench, on duty before Sebastopol, " there was not a man or officer in the camp who did not wish himself in England..honour and glory was humbug and if people in England thought it was fun, it was quite the opposite." (110)

The shortage of medicines and medical comforts had much simplified Dr.Wrench's treatment. He used five drugs, morphia, quinine, Dover's powder, tartarised antimony and calomel. Most of his patients lay on the ground with one or at the most two blankets and remained fully clothed. They were lucky to get meat and had none of the medical comforts thought indispensable in a London hospital. Some were suffering from dysentery, others had fever; some were frost bitten, others had been wounded by the shelling. It was all most disheartening. (111)

Wrench's feelings were shared by Dr.Hall, who viewed the Crimean winter with increasing alarm . Cholera was raging and the young soldiers were dying from exhaustion. If matters continued as they were the army would have disappeared by the spring. His efforts to send the sick to Scutari were being hindered by the lack of communication between himself and the staff of the Adjutant General, as on the occasion when he was instructed to ride to Balaclava on the following morning

and load 1,100 sick on board ships whose names would be given him at 10am. on the day of embarkation. It was, he informed the Director General, difficult enough to embark 1,100 sick on well arranged and well stocked ships when the crews were conversant with their duties; how much more difficult it was with scant and inadequate means.(112) And then, as if to emphasize the point which Hall was trying to make, on 13 December, the medical department was publicly censured for its alleged neglect of sick and wounded soldiers on board the troopship Avon.

It having been represented to the Commander of the Forces that the 297 sick and wounded on board the steam ship, Avon, under orders to proceed to Scutari, had not received that care and attention to which they were entitled, the Commander of the Forces directed a Court of Inquiry to meet on board that ship on Saturday, the 2nd. of December.

The Court, of which Col. Cameron of the 42nd. Highlanders was President, after making a personal inspection of the ship, and receiving evidence, has made its report to the Commander of the Forces.

The report takes notice of several deficiencies which in the opinion of the Court might, with due care and attention, have been remedied. The Report particularly draws the attention of the Commander of the Forces to the want of a sufficient number of Medical Men and Hospital Attendants for the service of the sick and wounded on board. The Report further states that this deficiency of Medical Men and Hospital Attendants was known to Dr. Lawson, the Principal Medical Officer at Balaclava, but that he took no steps to have it supplied.

In this opinion, after a careful perusal of the evidence, the Commander of the Forces concurs.

Lord Raglan has seen with pain and sorrow the apathy and want of interest which Dr. Lawson exhibited, as appears by the evidence, with respect both to the due care and sufficient supply of what was requisite for the comfort of the suffering men placed on board the Avon and he is compelled to visit such conduct with the severest censure. The Inspector General of Hospitals will take immediate steps to relieve Dr. Lawson of his present charge.

The Commander of the Forces is unable to exonerate Dr. Hall, the Inspector General, from all blame in the matter; as it is his duty, either by personal inspection or by the reports of his subordinates, to have ascertained that the ship was furnished with everything necessary for the comfort of the many sick and wounded on board, which the public service could, by any possibility, afford. (112)

The steamship Avon had been inspected by Dr. Lawson's predecessor, Dr. Tice, on 17 November, and had been passed as suitable for the transport of the sick. It had then remained in Balaclava harbour for two weeks during which time sick and wounded soldiers had been embarked as they were brought down from the heights. Three medical officers had been detailed for duty on board, Assistant Surgeons Wilson, Read and Miles. For two days during the vessel's stay in the harbour, Wilson had been ill with dysentery and Miles had been incapacitated by an ulcer on his leg. The numbers of medical attendants on board conformed with the regulations laid down by Lord Raglan's own staff. The Court of Inquiry had been held without benefit of expert medical witnesses and Dr. Lawson, the officer adjudged to be most at fault, had not been warned that his conduct was being called into question.

At a time when muddle and confusion were the order of the day and when the errors and failings of others, from the Commander of the Forces downwards, were no less in evidence, it was hardly surprising that Hall gave way to feelings of anger and despair when recording the event in his diary. He had put the inspection report of the Avon into the hands of Lord Raglan himself; the number of attendants was in strict conformity with Lord Raglan's orders. It seemed that his Lordship was intent on throwing discredit on the medical department and so make it the scapegoat for all the other mismanagement,

military and civil and so it would be since the weakest always went to the wall. Hall ended his entry in the diary by lamenting his acceptance of the post of Principal Medical Officer to the expeditionary force.

Alas my poor wife and children. Would I have never come here. To be fettered as I am by helpless people around me. At 60 it matters little what happens to a man personally for his days are, in the common course of nature necessarily numbered, but to those dependant upon him it is melancholy. I see now that an effort will be made to sacrifice me for political purposes and I have not, unfortunately, taken sufficient precaution to put many things in writing that would have protected me from injury. (113)

The despair felt by Hall was matched by that of his Director General who could not understand why there should be such hostility towards the medical department.

I am deeply grieved to see that we appear to be going from bad to worse. The General Order No.1 is a most severe one. We will never get over such attacks and what annoys me more is that I am not made acquainted with the facts as they occur. With every disposition to support the department and more especially yourself I am unable to do so from lack of information. Every class of men but doctors are able to speak of what happens in the Crimea and the proceedings, or at least what are said to be the proceedings, that brought out the order are spoken of in the clubs. (114)

Smith's feelings of isolation were not made less by Lord Raglan's refusal to supply any details of the Court of Inquiry held under the chairmanship of Colonel Cameron. It seemed that while Lawson's disgrace had been made public, the reasons for his being so severely censured were to remain a secret. (115)

By the beginning of January the rain had turned to snow and the lowered temperature began to inflict new discomforts. Hundreds of men were ordered to the trenches each night with no covering save their greatcoats

and the cheap and ill-fitting regimental shoes; as the trenches contained three feet of half frozen slush, they inevitably developed frost bite and were then crippled and rendered unfit for further service.

The army now consisted of officers and men almost new to the campaign for the generation of six months before had died or been invalided home. Generals, brigadiers, colonels, captains and men, the well known faces of Gallipoli, Scutari and Varna had all disappeared. (116) Captain Swinton of the Royal Artillery was found dead in his tent, suffocated by the fumes of a charcoal stove. (117) Colonel Bell found five of his men dead and frozen in a single tent. (118) During daylight hours a string of black dots could be seen moving across the vast expanse of snow between Sebastopol and Balaclava. When the dots came nearer they were seen to be men with red noses, white faces and bleared eyes. (119)

On the 23rd. January the Times correspondent came upon a line of sick men being carried from the camp to Balaclava on French mule litters. They formed a ghastly procession with closed eyes, open mouths and attenuated faces. Borne along two and two, only a thin stream of breath, visible in the frosty air, showed that they were alive. One figure was a horror, " a corpse, stone dead, strapped upright in its seat, legs hanging stiffly downwards, eyes staring wide open, the teeth set on the protruding tongue, the head and body nodding in frightful mockery of life at each stride of the mule." (120)

Assistant surgeon Wrench received two letters from Scutari. The first from a man who had not been to the Crimea and who described Scutari

as an uncomfortable and horrid place; the second from Hervey Ludlow who had served before Sebastopol and who had then been invalided to Scutari. It was, in his view, a paradise by comparison. (121)

Dr. Hall had tried to take possession of some huts in the village of Karani for use by the sick but had been told that they were needed for mules. As wood was plentiful in Balaclava he had applied to have some huts excavated and roofed over, after the manner of the Turks, but had been told that men could not be spared from the siege. 500 bedsteads had finally arrived in Balaclava but were without feet and therefore useless. The medical officers had still not recovered their medical stores, canteens and bedding put back on board ship at the time of the landing in Calamita Bay. A third of the army was sick and the other two thirds were ailing; the management of such large numbers was perplexing, particularly with so many medical officers themselves affected by sickness. (122)

The army was on half rations, " half a pound of mouldy bread and a half pound of salt junk." (123) The coffee beans were green and there was no fuel with which they could be roasted. Yet, in the manner of all armies, both sides made such adjustments as they could to reduce the hazards from enemy action. It became a matter of some concern not to provoke one's opponent. French, British and Russian piquets would call out to each other and would occasionally leave small presents of food or tobacco. They were, after all, common soldiers who, being unversed in the complexities of the Eastern question, were more concerned with survival than with the fall of Sebastopol. It became the custom for opposing sentries to shout greetings to each other and on one occasion

as a French piquet was retiring a Russian was heard to call out,
" Nous nous reverons, mes amis, Francais, Anglais, Russes, nous sommes
tous amis. " (124)

10. The report of the Hospital Commissioners and the establishment of a
Parliamentary Select Committee.(The Roebuck Commission) February -
March 1855.

The three commissioners sent out to the East by the Duke of Newcastle submitted their report on 23 February 1855. As instructed they had inquired into the condition and the wants of the sick and wounded soldiers and had examined the state and condition of the military hospitals in Scutari, Varna, Gallipoli and in the Crimea.

They had followed the progress, step by step, of a sick or injured soldier taken from the siege works before Sebastopol to a military hospital in Turkey; had examined the method of transporting the sick; the type of hospital accommodation provided in the field and the conditions prevailing in the ships which carried the sick and wounded from Balaclava to Scutari. In compiling their report they had included suggestions for remedying the more obvious defects revealed by their inquiries.(125)

They noted that on landing in Calamita Bay no vehicles had been available for the carriage of the sick and wounded and thought it likely that those soldiers falling sick from cholera who, from necessity, had been left on the side of the road had probably died when if transport had been available they might have been saved. The same problem had obtained after the battle of Alma when the want of ambulances had resulted in great delay in the evacuation of the

wounded. The ambulance waggons had finally been unloaded in early October and had rendered good service until the onset of the winter in November. Thereafter, as the roads between Balaclava and the British camp began to break up, they proved too heavy to be of value. By contrast, when fitted with pairs of seats or litters, the mules which had been borrowed from the French medical service proved to be of the greatest assistance.

It was the view of the commissioners that the ambulance corps had not answered the purpose for which it had been raised. The men, by their habits and their age, were unfitted for their arduous duties. Moreover, as none of them were smiths, farriers or wheelwrights the most trifling damage to the ambulance waggons rendered them useless. (126)

It was their wish that the Ambulance Corps be re-established from carefully selected men of good character, in the prime of life, and that there should be in the corps, wheelwrights, farriers and other artisans.

They were critical that no provision had been made for the transport of the heavy boxes containing medicines, medical comforts, and medical equipment all which had to be left on board the transports in Calamita Bay. They asked what would have happened if, following the flank march, the army had remained separated from the fleet and suggested that in future every regiment should be provided with a number of light two-wheeled vehicles, such as Bianconi or Irish jaunting cars, which could be used to transport medical supplies.

One bell tent (an unsuitable covering for wounded men) had been provided for each regiment and of the various hospital marquees loaded

on to the John Masterman at Varna only two had been unloaded by the time the battle of Alma was fought. This necessitated Dr. Hall using a ruined farmhouse as a casualty station. The commissioners noted, however, that there had been no shortage of medical equipment, save for long thigh splints.

Once the army was established in the camp before Sebastopol the shortage of hospital accommodation had become even more acute as instanced by events in the 88th. Regiment when, on one occasion, 120 men needed admission but only twenty-four beds were available in the regimental hospital. Moreover, by this time the facilities for nursing the sick were scanty in the extreme which led, for example, to the patients in the hospital of the 5th. Dragoon Guards being without pillows or sheets and with but a single blanket (127).

In the staff hospitals at Balaclava conditions might have been more comfortable for the sick had there been better liaison between medical practitioners and the commissariat. Thus, at one time there had been 600 hospital dresses in the purveyor's store none of which had been issued because no one had thought to fill out a requisition.

In discussing the part played by the medical officers, the Commissioners were satisfied that the numbers sent to the East had been sufficient for the needs of the army, save in the case of the Sappers and Miners who had been assigned a single Assistant Surgeon for upwards of six weeks. In the matter of hospital orderlies, a sufficient number had been detached from the regiments but some had then been employed on fatigues rather than on their primary duties.

The food provided for the sick both in the regimental hospitals and at Balaclava had been for the most part preserved rather than fresh and was universally acknowledged to have been insufficient in quantity.

In addition, there had been a constant shortage of medical comforts such as sago, arrowroot, ground rice, and beef essence. There had also been a shortage of opium, a drug much needed by October 1854, in the treatment of bowel disorders.

The Commissioners had found the patients to be generally dirty and noted that the loss of their packs, left on board ship following the landing in Calamita Bay, had been much felt

In transporting the sick from the camp to Balaclava, the lack of adequate notice to the medical officers had been a consequence of the dependence upon the mules of the French medical corps and therefore unavoidable. It had been, nevertheless, a source of much confusion and inconvenience.

The commissioners acknowledged that their visit to the camp before Sebastopol had taken place at the time of greatest crisis and stated that they had reason to believe that conditions had been much improved, commodious huts having been erected for the sick in the camps of every regiment.

After visiting the British camp they had then turned their attention to the General Hospital at Balaclava, housed in a building previously used as the village school. The hospital could properly accommodate a maximum of 98 men but during the worst of the winter had been required to accommodate far more, as on 3 October when 515 men had been admitted or on 17 November when 330 men had received treatment.(128)

At the time of their visit five staff surgeons had been on duty, exclusive

of Dr. Hall, a number barely adequate to meet the needs of the patients. In contrast, the number of orderlies released from the regiments for duty in the hospital had been sufficient.

Generally, the embarkation of the sick from the wharf in Balaclava had been expeditious enough, save for the delay attendant upon loading helpless men into a limited number of small boats, but the commissioners concurred with Dr. Anderson in deploring the practice of sending 600 - 1200 men for embarkation at the same time.

With the exceptions of the Andes and Cambria, the vessels used to transport the sick were ill-equipped for the purpose and were generally overcrowded, adding greatly to the suffering of the patients.

There were rarely enough medical officers to cope with the numbers of sick taken on board and never enough medical orderlies, the latter being restricted to four per hundred patients on the orders of Lord Raglan's staff. Furthermore, the difficulties of nursing the sick on board ship had been increased by the medical officers having no authority over the orderlies and therefore no remedy for even the grossest misconduct by them, save that of a complaint to the military authorities on arrival in Scutari.

The hospital equipment placed on board the vessels seemed always to be inadequate in quantity but there had seldom been any shortage of medicines or medical comforts. In many instances there had been delay in the departure of vessels brought about by adverse weather or by the sick arriving in insufficient numbers to justify the vessel sailing and on three occasions this delay had been in excess of three weeks. Deaths on board ship had been frequent in number and during one voyage of the Caduceus no fewer than 114 men had died. However, as all of them had been

suffering from asiatic cholera the commissioners were unable to attribute the deaths to the conditions on board the ship.(129)

On arrival in Scutari much delay in dis-embarkation was common, due on some occasions to the weather and on others to a shortage of small boats. Moreover the removal of the patients to hospital by the untrained orderlies was usually attended by great discomfort.

The Barrack Hospital, a building of great size, was partly occupied by patients and partly in use as a commissariat store. The part in use as a hospital was in good repair, amply lighted and ventilated, but the Turkish privies, though sufficient in number, were not adapted for use by Europeans and were in an offensive condition. Food was prepared in the single kitchen, a room of considerable size containing thirteen copper boilers heated by open fires. There was no form of cooking save boiling, and the steam constantly issuing from the boilers meant that the kitchen was permanently damp. Facilities for washing clothes were limited to a number of wooden troughs and the means by which patients might be bathed were lacking.

The General Hospital resembled the Barrack Hospital in lay out and was in a reasonable state of repair though its sanitary arrangements were no better than those at its sister hospital.

The Palace of Haidar Pasha, a wooden pavillion, was well ventilated and well lit but it too suffered from defective drainage.

The Cavalry Barracks at Kulleli was a much smaller building and housed only six wards. It had a good kitchen and a useful washhouse but its sanitary system was both inadequate and defective.

The Commissioners noted that the General Hospital had sufficient space for about 970 patients and the part of the Barrack Hospital being used for the care of the sick about 950. The General Hospital had had not become overcrowded until December 1854 but the Barrack Hospital had been overcrowded from the time of the engagement at the river Alma; thus on 28 October there were 620 patients in the General Hospital and 1,242 in the Barrack Hospital, a number which by 30 December had increased to 1034 and 2401 respectively.

In assessing the adequacy of the numbers of medical officers on the staff it was necessary to exclude the Inspector General and Deputy Inspector General, since their duties were purely administrative. It was also necessary to exclude the Ist. Class Staff Surgeons, each of whom was prevented from regular attendance on the wards by calls, " at every period of the day to inquire into the reality of the alleged wants of articles in the purveyor's stores and in countersigning the requisitions of subordinate officers. " (130) Thus, the burden of caring for the patients fell upon the Staff Surgeons 2nd. Class and the Assistant Surgeons, each of whom was responsible for about 80 patients, too large a number to allow the officer sufficient rest.

As in the Crimea, the orderlies were present in adequate numbers but were unsatisfactory in character and competence. Moreover, their low rate of pay, four pence per day, was not sufficient inducement for them to overcome their repugnance for their work. In addition to the orderlies Miss Nightingale and her 38 nurses had been employed on the wards since 4 November and had been chiefly occupied in attending

to the wounded and the severe medical cases. On the surgical wards their duties included washing and preparing the patients for the morning round of the doctors, dressing wounds, and in administering diets, drinks, and medical comforts as directed by the medical staff. On the medical wards their duties included dressing bed sores, supervising diets, and attending to the cleanliness of the patients and the wards.

Since much criticism had been levelled at the medical authorities for an alleged shortage of medicines and surgical appliances the Commissioners made particular efforts to arrive at the truth of the matter. They could find no evidence to support such allegations and though it was true that Miss Nightingale had supplied quantities of medicines from her private stores the greater number of those drugs so supplied were available in the apothecary's store.

From the evidence of Mr. Sabin and others it appeared that there had been a great want of bedsteads, mattresses and hospital utensils. Much of the need for such items had been met by Miss Nightingale but many items so supplied formed no part of regulation issue. On 31 January, shortly before the commissioners left Constantinople, the purveyors stores contained large numbers of sheets and all manner of other personal items. Furthermore, the store was soon to be augmented by the arrival of the Eagle, a vessel carrying among other articles no less than 27,000 shirts. Nonetheless, there was a need for an adequate reserve since the store supplied not just the Barrack and General Hospitals but the hospital at the Sultan's Palace, the Cavalry Barracks, the convalescent hulks moored in the Bosphorus, and other

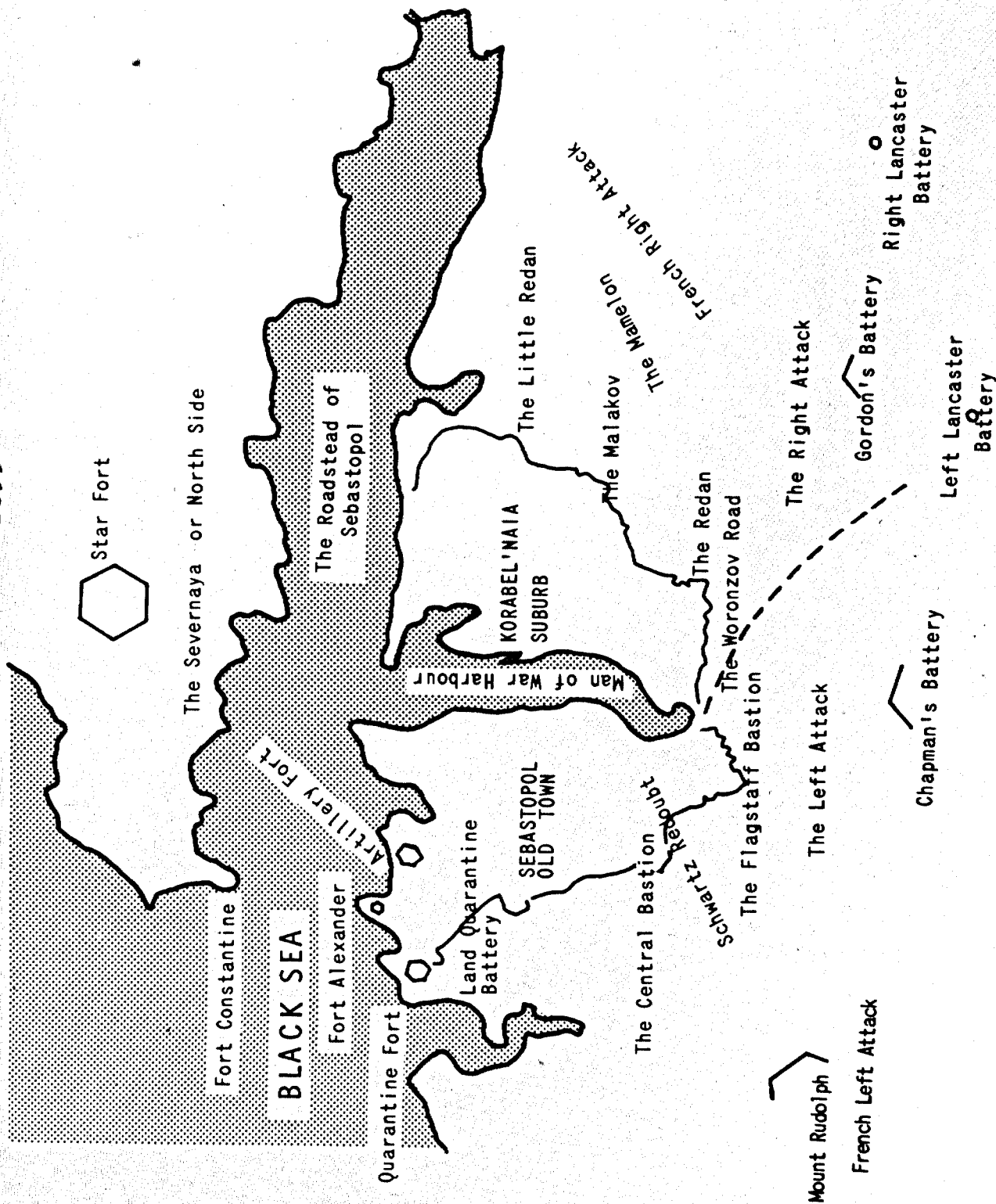
establishments at Abydos, Smyrna, and Gallipoli, as well as the Regimental and base hospitals in the Crimea.

The commissioners were critical of the arrangements made for washing the clothing and bedding of the patients, most of which was far from clean when returned, but acknowledged that improvements had been made by Miss Nightingale. They noted that an average of 500 shirts had been washed each week in the wash house which she had established adjacent to the Barrack Hospital.

Miss Nightingale had also been generous in her provision of medical comforts, a daily issue of which included 25 gallons of beef tea, 15 gallons of chicken broth and 240 quarts of barley water but the commissioners thought it right to observe " That with respect to an important article of medical comfort, viz Port wine, the quantity which has been supplied, as we are informed, has in our opinion been excessive and wholly disproportionate to the real wants of the sick.(131)

They noted that there had been particular problems of the patients' shirts. Miss Nightingale had supplied 10,500 cotton and 6,000 flannel and another 11,231 had been issued by the purveyor. The difficulty had arisen because under ordinary circumstances shirts were not part of hospital clothing. Every soldier was required to have three of his own but after landing in Calamita Bay all had been forced to leave two of the three in their knapsacks. The majority of soldiers had not then been reunited with their possessions by the time of the battle of Inkerman. It followed that the clothing of those sent to Scutari was filthy and verminous.

OPERATIONS BEFORE SEBASTOPOL
1854 - 1855



After describing the conditions under which the officers were treated, conditions which differed little from those of their men, the commissioners ended their report by putting forward a number of suggestions which they believed might improve the care of the sick and wounded.

They thought that the employment of soldiers as hospital orderlies was inexpedient. They believed that the duties of steward, ward master and deputy ward master required a degree of education not usually found in those drawn from the ranks and suggested that if, in future, it became necessary to employ soldiers in such posts then those chosen should be of strong constitution, intelligent and of good character. They also believed that their pay should be commensurate with their responsibilities

The number of patients assigned to each 1st. and 2nd. class surgeon needed to be reduced and to promote better health among medical staff means should be found of providing quarters away from the wards.

In emergencies extra medical staff should be recruited from among the staff surgeons in other parts of the world rather than taking surgeons from the regiments.

The duties of the purveyor, which included the provision of clothing; stationary; food; washing; the superintendence of hospital servants; the cooking and distribution of meals; the supervision of all cleaning and repairs throughout the hospital; the arrangements of funerals; the drawing up of wills; the registration of patients and the payment of officers and men; were too numerous and too heterogeneous to be carried out by one man.

As the war seemed likely to continue, additional accommodation should be sought in Constantinople where resources were more readily available and where the embarkation and dis-embarkation of patients could be effected with less difficulty.(132)

The report of the commissioners seemed to support much that Smith had been advocating since the dispatch of the expeditionary force in February 1854 and he might have drawn comfort from it had he been permitted to read a copy. In the event the duke was no longer Secretary of State for war and his successor, Lord Panmure, saw no reason why the report should be sent to the Director General. (133)

As the siege dragged on into the new year with there being little to suggest that the fall of Sebastopol was any nearer, the critics of the Aberdeen administration became increasingly dissatisfied with the management of the war. It seemed to Delane, editor of the Times, that " The cold shade of Aristocracy was blighting the nation." (134) It was time for change. Perhaps the great railway administrators, the contractors, and the men who owned and directed whole fleets of merchant ships could succeed where the those in authority had failed. Why not dismiss the aristocrats and employ experts to solve the crisis in the Crimea ? (135)

The call for a change in the management of the nation's affairs found its most vigorous expression in the person of John Arthur Roebuck, an independant member of parliament of radical persuasion, who sat for Sheffield. As a representative of the new urban middle

class Roebuck was vehemently opposed to aristocratic privilege and saw Lord Aberdeen's administration as, " mischievously corrupt." (136) He had no expert knowledge of either the army or the war in the East but held firm opinions on both. Possessing energy and considerable powers of oratory he spoke against the government on every opportunity. Thus on 27 January 1855 he rose in the House to table the motion that " A select committee be appointed to inquire into the condition of our army before Sebastopol, and into the conduct of those departments of government whose duty it is to minister to the wants of the army." Roebuck's motion was opposed by the government but, in a debate lasting two days, was carried by the large margin of 157 votes. Lord Aberdeen resigned on the following morning and after a delay, in which Lord Derby and Lord John Russell tried unsuccessfully to form an alternative administration, the Queen, somewhat reluctantly, sent for Lord Palmerston.(137)

Lord Panmure succeeded the Duke of Newcastle as Secretary for War but if Dr.Smith hoped that a change in political master might bring some improvement in the relations between himself and the War Department he was soon disabused of such a notion. Immediately prior to his departure the duke had asked about the adequacy of the numbers of medical officers being employed in the East. Smith had replied by saying that as he was not the principal medical officer to the expeditionary force and lacked knowledge of both Turkey and the Crimea he felt he could not reply to such a question without seeking the opinions of his senior officers in the East. Colonel Mundy of the war department was quick to point out that such equivocation was unacceptable to

the new Secretary of State. Lord Panmure considered the Director General's reply " most unsatisfactory," and he required a distinct and immediate answer to three questions.

Were there sufficient experienced medical men with the expeditionary force ?

If not, had he the means of sending more ?

If he did not have the means to send more, why should not civil physicians of experience, a class of doctor of which there were few in the army, be employed and given temporary rank ?

Lord Panmure did not think these were questions to be sent abroad but questions to be answered on the instant. (138) Smith must have felt he could do little to find favour with his masters but he hastened to reply, offering a reasoned and courteous answer.(139) He was to find the same unwillingness on the part of others to comprehend the difficulties under which he was working when he was called to give evidence before the Parliamentary Select Committee in April.

11. The events in Scutari and the development of the campaign in the Crimea; February - June 1855.

On 14 February Smith wrote to the Under Secretary at the War Department furnishing the weekly report on the state of the army's health. There were 4,851 sick and wounded in the Crimea and 4,997 in the military hospitals in Turkey. It seemed likely that still more accommodation for the sick would be needed and he pressed for the establishment of another hospital at Smyrna, on the eastern seaboard of the Aegean, 500 miles south west of Scutari.(140) Given the numbers of medical officers already sent to Turkey it was probable

that such a hospital would have to be staffed by the civil practitioners, a group of doctors whom he was now recruiting in obedience to his instructions from Lord Panmure. (141)

However, if Smith was being bullied by the authorities at home, news news from the Crimea was more encouraging. The sick list was still excessive, especially in the Guards Brigade, but there was some improvement in the health of the army generally. Supplies were beginning to arrive regularly and the commissariat were at last able to issue fresh vegetables. The lime juice dispatched by Smith had arrived and was being given out as a regular ration. The new hutted hospital on Castle Point at Balaclava was nearing completion and the screw steamers Sidney and Australia were being fitted as hospital ships, each to carry 150 patients. There were also plans to fit out the Melbourne and Brandon. (142)

Affairs were also improving in Scutari where the organizing abilities of Miss Nightingale, Dr.Cumming, and Lord William Paulet were making inroads into the filth and confusion of the Barrack Hospital. Dr.Cumming had agreed to take another twelve nurses from Miss Stanley's party. Dr.Meyer had found employment at Smyrna. The young Mr.Percy had returned home and Mr.Herbert had assuaged Miss Nightingale's anger by accepting blame for Miss Stanley's arrival in Scutari. He had replied to Miss Nightingale's letter of 15 December urging her not to resign, had given her authority to act as she thought best and, as a final concilliatory gesture, had even offered to pay the expenses which would be incurred if Miss Stanley and her party returned to the United Kingdom.

Miss Stanley's stay in Scutari had been unhappy and her only consolation had been her reception into the Catholic church. Thus, when it was suggested that she might take charge of the hospital at Kulleli she seized upon the offer as a chance to escape from the dominating influence of Miss Nightingale. It was then her misfortune to find out that she was unsuited for the work. An indifferent administrator given to exaggerated gestures, usually involving great expense, she became increasingly hysterical as the sick continued to pour in. When Dr. Cumming visited the hospital he found that she had given up visiting the wards fearing her health would be affected. On receiving a critical report from him she once again appealed to Miss Nightingale for understanding and pleading for a reconcilliation. By her reply Miss Nightingale ended their friendship. " I have nothing to forgive for I never felt anger. I have never known you." Shortly afterwards Miss Stanley's conversion to Catholicism became known and caused much anger among the Anglican community, not the least prominent of whom was Lord Stratford. Friendless and in despair she eventually abandoned her struggle and sailed home leaving the hospital at Kulleli in the charge of Mother Bridgeman. (143)

Miss Nightingale had not been alone in encountering administrative difficulties for Dr. Cumming was also in dispute with Lord William Paulet. The convalescents were being allowed to visit the canteen of the military depot in Scutari and were returning drunk. Men, women, and children from the garrison were visiting the hospitals at all hours of the day and night where they were exposed to the risk of infection. Lord William had dismissed a medical officer without consulting Dr. Cumming. Alarmed at the threat to his own authority, Cumming wrote

to Smith who, in turn, appealed to Colonel Mundy. The medical staff knew best what was necessary for the sick and wounded and the principal medical officer should have the power to decide what personnel he should employ. Lord William was evincing a disposition to exercise power which Smith had never before seen in forty years service. (144)

In the Crimea preparations were being made for the second bombardment of Sebastopol, planned for early April, and as the weather improved it, at last, became possible to move ammunition by road. By 28 March it was also possible to move it by rail for the line which had been under construction since January had reached the artillery depot on the Col de Balaclava. (145)

The bombardment began on Easter Monday, 9 April, in thick mist and drizzling rain. The first gun commenced firing at 5.35 am. and within a few minutes the whole of the Left and Right attacks were in action. As the firing proceeded the weather told heavily on the men serving the guns and greatly increased their labours. The tackle used in working the guns became wet and would not run and as the boards of the gun platforms were slippery it was difficult to obtain purchase with hand spikes.

Firing continued until dusk and was resumed at dawn on the following morning, a pattern repeated for the next six days. However, despite the expenditure of immense quantities of ammunition, the Russian guns were not silenced and although during each day superiority of fire had been achieved by the Allies, each night saw the Russians repairing their defences and replacing their damaged guns.

Immediately after the bombardment Lord Raglan wrote to the Secretary of State describing the events of the week and attempting to glean what little comfort he could from so inconclusive an action.

Since I wrote to your Lordship, a steady and heavy fire upon the works of the enemy has been maintained by the Allies.

The fire of the British Artillery, chiefly directed against the Garden batteries, the Barrack battery, the Redan, the Malakoff Tower, and the Mamelon, has been most effective, and the enemy's works have suffered very considerably; although they have, as usual, made a good use of the night to repair damages..

Our batteries and parapets continue to stand remarkably well, notwithstanding the unfavourable state of the weather. The enemy's fire has been comparatively slack, but the practice good, and, owing to them having ascertained the range of our batteries with great nicety, several guns have been disabled in both the Right and the Left Attacks. (146)

During March the health of the troops had begun to improve but in April there were ominous signs that the cholera was returning. The first case to attract the attention of the medical staff occurred in a trooper of the 10th Hussars, newly arrived from India; the second was in the 7th. Regiment; the third was in the 17th. Regiment and the fourth in the 34th. There seemed to be no recognisable pattern in the spread of the disease which the medical staff could understand, though it was clear that those newly arrived in the Crimea seemed at greatest risk. It was, wrote Dr. Hume of the 13th. Light Dragoons, " As if the drafts of men arriving in the Crimea fed the disease." The old soldiers, in the country since the landing at Calamita Bay were rarely attacked, and if they were then their illness was more manageable. (147) Apart from its predilection for newcomers the disease showed little tendency to attack any particular group. Young and old; weak and strong; sober and dissipated, all fell victim. Indeed, as Dr. Andrews of the

1st.Dragoon Guards pointed out, it often attacked the finest and strongest men in the Regiment.(148) Dr.Hall reflected that it might be due to the combined effects of fatigue and local miasm but could not then understand why the men of B, G, and P batteries, who were not required to go into the trenches and who were not overworked, were so afflicted.(149)

The disease seemed in some way to be linked to an increased incidence of bowel disturbance but was not obviously related to dysentery, which was largely in remission. Dr.Muir of the 33rd.Regiment noted that his cases were characterised by two peculiarities. Firstly, the absence of any premonitory symptoms, an attack usually being ushered in by sudden collapse in the absence of diarrhoea. And secondly, by the occurrence of a fever which more often than not was fatal, as in the case of Private Hall.

Pte.James Hall aged 35 years. Admitted to hospital at 5am. Was attacked with vomiting and cramps half an hour prior to admission, having been perfectly well on going to bed. Pulse imperceptible; his body a livid colour. Cold and covered with a profuse perspiration; breathing hurried and laboured. Expired 10.30 am.
(150)

Five hundred miles away at Scutari, conditions in the Barrack Hospital were satisfactory and, though her jurisdiction of the nurses in Balaclava was far from certain, Miss Nightingale decided to visit the Crimea.(151) She sailed from Scutari in the Robert Lowe on 5 May and was accompanied by the Bracebridges and Alexis Soyer, the chef from the Reform Club. Arriving in Balaclava on 5 May she disembarked with the intention of visiting Lord Raglan but, in his absence, visited a mortar battery where she was feted by the troops. The next day she

visited the General Hospital in the village of Balaclava and the new hutted hospital on Castle Point where she discussed plans for their improvement but during the afternoon complained of great weakness. On the following afternoon she fainted and was declared to be suffering from Crimean fever. Nursed for the next two weeks in Balaclava, she was then carried back to Scutari for a lengthy convalescence. (152)

Meanwhile, in the Crimea the epidemic of cholera was spreading and as more and more men fell ill Dr. Hall wrote to Lord Raglan to warn against the severe duties which were being imposed upon them. On receiving a copy of Hall's report, Dr. Smith made the same point to the Military Secretary. It was his painful duty to report that cholera had again broken out. If it become epidemic, the exhaustion of the men through lack of sleep and rest would render them more vulnerable to attack from the disease, when under other circumstances they might be more resistant. Nothing in reference to the army in the East deserved more serious consideration. Should his advice on the subject be disregarded then Lord Raglan would soon be hampered more by the ravages of disease than the casualties of war. (153)

Since Smith was not given to exaggeration, his concern over the spread of cholera was transmitted to the Secretary of State who lost no time in writing to Lord Raglan. Enclosing a summary of hints, received from persons accustomed to dealing with the malady, he urged the adoption of preventive measures. Lord Raglan would do well to devise regulations for the detection of premonitory symptoms, which soldiers, in general, were apt to conceal or make light of. The

cleanliness of the camp should be attended to. Adequate food and rest for the men were considered essential by the Director General of medical services. Too much attention could not be paid to temperance and it would be worth considering whether or not the ration of spirits should be dispensed with and some weaker liquid issued in its place.(154)

Although Lord Panmure's letter contained much that was sensible it was largely ignored by Lord Raglan who at the time of its arrival in the Crimea was preoccupied in drawing up his plans for the assault on the Russian strongpoint known as the Redan. The attack was to be launched on 18 June, the anniversary of Waterloo, a somewhat unpropitious choice given that the British and French were now allies, and was to be preceded by a bombardment. The plan of assault was complicated and would require careful coordination. At 6 am. on the 18th, three French divisions, under the command of General de Salles, would move against the Quarantine batteries, the Central Bastion and the Flagstaff Bastion. In the centre, two British columns, commanded by Sir George Brown, would attack the Redan. And, on the right, three more French divisions, under the command of General Autemarre, would assault the Malakov.

By 15 June Lord Raglan and General Pelissier had agreed upon the disposition of their troops. Then, on the afternoon of 16 June, Pelissier came to Lord Raglan to tell him that it was the opinion of General de Salles and the French engineers that the assault on the Quarantine batteries and the Central Bastion was unlikely to succeed and was to be abandoned. Lord Raglan protested at a change made so late in the day but, given that his allies had so little faith in their ability to capture the Central Bastion, then had little choice but to agree.

The British assault party was increased by 400 men. Sailors from the Naval Brigade were told off to carry scaling ladders. Men from the artillery were assembled and given instructions to spike the enemies' guns, once entry to the Redan had been gained. But, despite the change in plan, it was still understood that the English troops would not attack the Redan until the Malakov had been captured.

The allied bombardment opened at daybreak on 17 June and continued until nightfall; thereafter vertical fire from mortars was maintained during the night. The assault on the Russian strongpoints was now scheduled for 6 am. 18 June. Then, at 8.30 pm. on 17 June, General Pelissier sent his A.D.C. to tell Lord Raglan that the French attack had been brought forward to 3.30 am. in order that his men might advance under cover of darkness. Although disconcerted by yet another change in plan Lord Raglan had little choice but to accede and at 2 am. moved forwards with his staff to an observation point in the third parallel. At 3.10 am., to the consternation of all in the British party, the French were observed to be advancing prematurely on the left. Roused by the noise of the French advance, the Russians were soon pouring a murderous fire into the massed ranks of infantry and within a short time it was evident that the French attack was faltering.

Though it had been agreed that the British troops would be held back pending the fall of the Malakov, Lord Raglan now decided to commit them to a attack on the Redan. At a signal 800 men stood up and began to cross a quarter of a mile of open ground, where they were exposed to the fire from 4,000 Russian rifles and more than 100 guns. Few reached the ditch in front of the Redan and even fewer lived long enough to step on the scaling ladders. Within minutes all the senior officers were dead

and the troops, leaderless and dispirited, began to retreat to the third and fourth parallels under covering fire from the allied guns. Once it was observed that the bombardment had subdued the Russian fire Lord Raglan resolved on a second assault. Orders were given for fresh troops to be brought up but while preparations were being made a message was received from General d'Autmarre which said that the French losses had been too great to contemplate any further attack.(155)

On the morning after the battle Prince Edward wrote to his cousin, the Duke of Cambridge, on convalescent leave at Windsor. (156)

There is no disguising the fact - we were devilish well licked yesterday. All the batteries opened at day-break on Sunday and by nightfall it was supposed that the enemy was shut up. The assault was ordered from 3 am. next morning; the French to attack the Malakov under d'Autemarre, the English to attack the Redan under Brown. We formed three columns of the Light Division, 2nd. and 4th. and one Brigade of the 3rd. Div. under Eyre. Each column of 1750 men. Lord Raglan and staff left Hd.Qrs. at 2 and rode to the 21 gun battery, Right Attack. Here we got off and walked to the 3rd. parallel. Soon after 3 the signal was fired, (a bouquet of rockets) up went the French to the Malakov, and English to the Redan. The enemy was too strong and received them with grape and cannister from the 60 pounders. Both were beaten back with great loss - French 5,000 hors de combat, English 1,000, with Sir John Campbell killed, Eyre wounded, poor Yea of the 7th. killed, young Fitzclarence of the 7th. legs amputated high up and not expected to live.

It was a bad day, we had expected too much, nothing less than the fall of Sebastopol.

Captain Robert Hawley of the 89th. Regiment shared Prince Edward's view that too much had been expected of the men but was less charitable towards his Commander-in-Chief.(157)

Imagine the folly of Lord Raglan in sending eight hundred men, for reserves and supports were not up, to attack a hugh fort, its guns unsilenced, with a natural glacis extending some two hundred yards

and an abattis perfect, untouched and impassable, standing eighty yards out. There was no firing party to keep down that of the work, nor the commonest arrangement which a Sandhurst boy is taught is requisite in such occasions. Our fine fellows were sent against 4,000 men as if they could, with a bound, clear everything and then take issue with the bayonet for orders were given to use it and not to fire.

A Russian officer, questioned about the action after the fall of Sebastopol made the same criticism but more succinctly.(158)

Your men fought like lions, but your generals, were they drunk ? They made such a fool's attack.

The action had exacted a heavy toll. 21 officers and 144 other ranks killed; 68 officers and 1058 other ranks injured; 2 officers and 150 other ranks missing.(159) Most casualties were treated in the regimental hospitals or in the newly erected general hospital on the Heights but about 150 were sent down to Balaclava for dispatch to Scutari.(160) The task of caring for the injured fell chiefly on to the assistant regimental surgeons, as Dr.Grieg recorded subsequently in a letter to his father. (161)

We assistant surgeons had to manage everything. The wounds were chiefly inflicted by grape, and beastly wounds they were too, and others by minie ball and by round shot. The men came to hospital in a most melancholy condition, covered in blood and dust. The severe cases by stretcher, the others walking.

Since the surgeons had little control over sepsis, many of the wounded survived operation only to succumb to secondary infection; a fate likely if the wound was extensive or if the original injury had penetrated one of the body cavities.(162)

On the journey back to headquarters Lord Raglan maintained an appearance of outward calm but was inwardly much depressed at yet another reverse.(163) To add to his sorrows, on 24 June, his friend and supporter in the Crimea, General Estcourt, the Adjutant General, died of cholera, an event so distressing to Lord Raglan that he was unable to attend the funeral for fear he broke down in front of his men.(164) On the following morning he complained of feeling unwell and a few hours later had a violent attack of diarrhoea which left him much weakened. By 28 June it was apparent to those around him that he was dying. By 5 pm. he had slipped into unconsciousness and at 8.30pm breathed his last.

His death aroused conflicting emotions in his men. His staff, being closest to him, mourned him as a great man.(165) Some, more removed from his influence, were saddened at his passing.(166) Others, still more removed, were indifferent.(167) In reflecting upon his life and accomplishments, the Times correspondent drew a portrait which was not wholly inaccurate.(168)

That Lord Raglan was an accomplished general, as brave a soldier as ever drew a sword, an amiable, honourable, kindly man, animated by zeal for the public service, of the most unswerving fidelity to the truth, devoted to his duty and to his profession cannot be denied; but he appears to have been a man of strong prejudices and weak resolution, possessed of limited information, offensively cold to those whom, like Omar Pasha, he considered vulgar or obtrusive, coerced without difficulty by the influence of a stronger will, and too apt to depend upon those around him when he should have used his own eyes. Still there was a simplicity about his manner, something of the older heroic type in his character, which would have compensated for even graver defects, if their results had not been, in many instances, so unfortunate for our arms.

12. The proceedings and conclusions of the Parliamentary Select Committee.

March-June 1855.

The Select Committee began its work on 30 March 1855 and, having received its commission from Parliament, was free to call whomsoever it wished for questioning. During the first month it examined, among others, General de Lacy Evans, the Duke of Cambridge, Lord Lucan, Augustus Stafford, the Honourable Sidney Godolphin Osborne, Benson Maxwell, Dr. Duncan Menzies, former Principal Medical Officer at Scutari, and the Honourable Jocelyn Percy, Miss Nightingale's former admirer; witnesses who had had direct experience of conditions in Scutari. It also examined Dr. Smith on three occasions and in the answers which he gave to the committee a picture of the difficulties under which he had been labouring began to emerge.

He did not know how many masters he had but he was bound to obey the instructions of at least five authorities, the Commander-in-Chief, the Secretary at War, the Minister for War, The Master General of the Ordnance and the Board of the Ordnance. (169)

He had been unable to recruit sufficient young medical officers from among the civil practitioners to meet the needs of the expeditionary force and had been forced to recall officers from other parts of the Empire. (170)

He had not obtained the cooperation of the Purveyor's department and was unclear about his own authority over it; sometimes he had been told that he had full authority and at other times that he had none. (171)

He explained the difficulties which had arisen as a consequence of

Purveyor Ward's incompetence and admitted that in seeking to remove him he had been over-ridden by Lord Raglan.(172)

He defended the unfortunate Lawson and expressed surprise at Lord Raglan's censure. In his opinion, " Dr Lawson had been a man in a position of great trial during 10-12 years and had executed his duties in a way which almost none could have done. He was remarkable for his humanity and his zeal and for his character in every respect." (173)

He confirmed that at the time of his examination 529 medical officers had been sent to the East of whom 29 had died and 58 had been invalided home. (174)

Throughout a lengthy examination Smith only once showed any emotion in response to what were often offensive or hostile questions. This came on the occasion of his first re-examination after he had heard the testimony of Mr.Osborne. Mr Osborne had alleged that Dr.Smith's professional assistant, Dr.Spence, sent out as an Hospital Commissioner and later drowned in the Prince on the night of the gale, had been his son-in-law. The charge cast a slur on Smith's integrity as a public servant and was one which he denied with uncharacteristic vehemence.(175)

The poor unfortunate gentleman who has been described as my son-in-law was no connexion of mine. If I had a relative and that appointment was to have brought him £10,000 I would not have employed a connexion of mine on such a duty as that. I beg distinctly to contradict that he was my son-in-law. My blood boils at being mis-represented. I hope and trust I have passed forty years in the service as an honest man, and when I hear persons stating in evidence that which must necessarily prejudice my honour and station I feel indignant.

As the committee continued its work during April and May it examined, among others, the Clerk to the Ordnance, who was asked to explain the failures in supply; the Duke of Newcastle, questioned about the aims of the previous administration; Mr. Sidney Herbert, questioned about the conduct of the War Office; General Burgoyne, Chief Engineer to the Expeditionary Force, questioned about Lord Raglan's strategy in besieging Sebastopol and, on 15 May, Lord Aberdeen, who was asked to explain the reasons for the outbreak of war. Then, with that fine irony which seemed an inevitable accompaniment to all aspects of the campaign, the findings of the committee were read out to the members of the House of Commons at 4.30 on 18 June, the day upon which the Allies were repulsed at the Redan and the Malakoff with the loss of so many lives.(176)

Because of the complicated nature of the inquiry, the variety of subjects investigated, the numbers of witnesses examined and the frequent inconsistency of the evidence, an exposition of the facts had been made difficult, a difficulty increased by the impossibility of summoning witnesses from the Crimea. Moreover, the fullness of the report had been limited by matters of State. But, having offered a preliminary explanation for the restricted nature of their report, the Committee stated the opinions which they had formed on the condition of the army before Sebastopol and upon the conduct of those departments, both at home and abroad, whose duty it had been to minister to the wants of the army.

The condition of the army before Sebastopol.

An army encamped in a hostile country, 3,000 miles from England, and engaged in besieging a fortress, which from want of numbers it could not invest, was, of necessity, placed in a situation where unremitting fatigue and hardship had to be endured. Nonetheless, the Committee was of the opinion that the amount of unavoidable suffering had been aggravated by causes which were attributable to dilatory and insufficient arrangement for the supply of the army.

In arriving at their opinion the Committee took account of the unexpected severity of the storm of 14 November and were not unmindful of the difficulties of organization inevitable after a long period of peace.

In discussing its findings the Committee made reference to the evidence upon which its opinions had been based. This evidence was that, from 16 September until the end of October or possibly the middle of November, the troops suffered from over-work and from dysentery but were not, on the whole, ill provided with food. However, even at this time, there was a painful deficiency of all appliances for the proper treatment of the sick and wounded.

Then, as the season advanced and the sickness increased, the numbers of soldiers fit for duty was reduced rendering the amount of duty to be performed by the rest disproportionate until, by the middle of November, the army was reduced to a condition which was melancholy to contemplate. The troops were exposed, under single canvas, to all the

sufferings and inconveniences of cold, rain, mud, and snow. They suffered from over-work, exposure, want of clothing, insufficient supplies, and imperfect accommodation for the sick and wounded.

The fatigue suffered by the troops was inevitable given the inadequate size of the expeditionary force but this was a matter outside the scope of the inquiry.

The conduct of the departments both at home and abroad whose duty it was to minister to the wants of the army.

The conduct of the Government at home.

The responsibility for the expedition to the Crimea rested with the Government. The Cabinet appeared to have been confident of success and had believed that Sebastopol would fall quickly by coup de main. Indeed, the Duke of Newcastle had expected the army to winter in Sebastopol or to have returned to the Bosphorus before the winter weather set in.

The Committee noted that Lord Raglan had stated in his dispatch of 19 July 1854 that the invasion of the Crimea was more in deference to the wishes of the Government than to any information which he had in his possession about the size of the enemy's forces or the state of preparedness of those forces.

The general direction of the war had been in the hands of the Duke of Newcastle who, until July 1854, had also been the Secretary for the Colonies. A change had then been made relieving the duke of his duties to the Colonies but when the change was made the Cabinet had not considered the best means by which this could be brought about. Rather, its members had separated at the end of the Parliamentary session in August and had not met again until October. Furthermore,

when a reorganization of the War Office was suggested by Lord John Russell, the matter had not been pursued in August and September, a time when changes might have been made with advantage to the army in the East.

At the time of the expedition to the East there was no reserve and every regiment of the line had been robbed to make up the numbers. Later on the men sent to reinforce the army were recruits, ill-fitted for the rigours of the campaign. The order to attack Sebastopol had been sent to Lord Raglan on 29 June but the decision to form a reserve had then been delayed until November. Moreover, by December the scope of the War Office to reinforce the army was so reduced that it had been necessary for the Government to introduce a Foreign Enlistment Bill.

The Committee regretted that the Government, knowing the size of the army, the climate in the East, and the foreign power to be opposed, had delayed the formation of the reserve until so late on in the campaign.

The Secretary of State for War.

On accepting the Secretaryship the Duke of Newcastle had been at a disadvantage in that he had been given no brief outlining his duties and had no precedents for his guidance; to add to his difficulties his Under-Secretaries were new to their work. In his dilemma he had undertaken the superintendence of various departments whose internal organization was unsatisfactory. Also, he had been imperfectly acquainted with the means of exercising his authority over various departments who were themselves unsure of their relative positions. His interference had been sought in matters of detail but, frequently, he had left in ignorance of matters which required his attention.

Thus he had been unaware both of the state of the hospitals in Scutari and of the sufferings of the sick and wounded on route from Balaclava to the Bosphorus until told by travellers on their return to the United Kingdom.

Harassed by rumours, he had then sent a commission of inquiry to Scutari in October 1854 which did not complete its mission until the following April; this was a form of proceeding ill-adapted to the urgent needs of men suffering under mismanagement and neglect.

The Secretary at War.

The appointment of the Secretary of State for War and the Colonies had diminished the power of the Secretary at War and limited his influence to matters of finance. Thus, Mr. Herbert had had no powers to originate anything. Nonetheless, from praiseworthy motives, he had undertaken much that was not the business of his office, encouraging expenditure by the Commandant at Scutari on anything thought necessary and placing unlimited funds at his disposal. Unfortunately, while expenditure was encouraged the methods of accounting made it difficult for the officers of the Commissariat to issue new articles of clothing and equipment.

The Ordnance Department.

The Department was responsible for the issue of all manner of stores and equipment and played the central part in supplying the army in the field. It differed from other boards in that it was controlled by its senior officers, the Master General (a position still held by

Lord Raglan) and the Surveyor General, both of whom had been out of the country at a critical time for the army in the East. In Lord Raglan's absence Sir Hew Ross had been appointed Lieutenant General of Ordnance but as such he had not possessed the authority of the Master General. The Board of Ordnance ran efficiently only in the presence of a strong and vigilant Master General and in the absence of such a figure the evils of the system became apparent. Thus, at a time when much business to do with the expeditionary force needed urgent attention, Sir Thomas Hastings, Controller of Stores, and Mr. Monsell, Clerk to the Ordnance, were in conflict with each other and with the remaining members of the Board.

The Department of the Commissariat in the East.

It was the duty of the Commissariat to supply provisions for the men, forage for the animals and transport for the army. Commissary General Filder had been selected for his special experience and ample funds had been placed at his disposal. Unfortunately the system in operation prior to the outbreak of war had provided neither him nor his officers with opportunities to become acquainted with the needs of an army in the field. Moreover, once in the East, Commissary Filder and his men were called upon to supply stores of every description not previously within their remit.

The Road from Balaclava to the Heights.

Because so much misery and hardship had resulted from this road becoming impassable, the Committee had attempted to find out who was responsible for its maintenance. In early November Commissary Filder had written to the Quarter Master General expressing

disquiet at the deterioration in its surface. He had pointed out the consequences of an interruption in the supply of stores to the British camp on the Heights but General Burgoyne, Chief Engineer to the Expeditionary Force, had said that men could not be spared from the work of the siege to spend time in its repair. In the view of the Committee this showed a want of foresight at a time when when energetic measures should have been adopted to repair its surface. Had these been taken then the lives of many soldiers might have been spared.

The Medical Department at Home.

The Director General was responsible to at least five masters. It was the view of the Committee that his business could have been conducted more efficiently had he been responsible to one. At the time of the departure of the expeditionary force he had advised on the formation of an ambulance corps from young and able bodied men but his advice had been rejected by Lord Raglan and Lord Hardinge. In May he had urged that a number of ships be fitted out for the transport of the sick and wounded but his advice had been ignored. He had also advised on the provision of new clothing for the troops but again his advice had been rejected.

In the conduct of his affairs he had been handicapped by the memory of the strict economies which he had been forced to observe in the long period of peace preceding the outbreak of war. He had also been fettered by a rigid system of accounting more applicable to peace than to a time of war.

The Medical Department in the East.

A greater number of medical officers had been attached to the expeditionary force than had ever before accompanied an army sent to foreign soil and, though many had been incapacitated by sickness, there was abundant testimony to the zeal and efficiency of individual officers. All had been handicapped by the want of the commonest necessaries which, at times, included a want of bedding, garments for the sick, medicines, and medical comforts.

The Hospitals at Scutari.

The Committee had noted the disgraceful conditions which had prevailed in the hospitals during the autumn of 1854 and had endeavoured to find out who had been responsible for permitting it to occur. Major Sillery had been in sole military charge while Dr. Menzies had been the senior medical officer. Dr. Menzies appeared to have made repeated requests to Major Sillery for improvements to be made to the hospitals but had himself been so overwhelmed by other work that he had been unable to carry out the duties of medical superintendant. His difficulties had been made worse by a clash with the purveyor, nevertheless, blame attached to him for not reporting the many deficiencies which existed to the Director General.

Major Sillery appeared to have been paralysed in his attempts to govern the hospitals in his charge and had, for example, been afraid to incur the responsibility for engaging Turkish workmen to remedy the many structural defects in the Barrack Hospital. Although he was indefatigable he possessed neither the rank nor the personal authority

to be successful in his duties. The conduct of the apothecary at Scutari had been questionable. He had not, for example, kept records of stores received or issued between 24 September and 28 November, the day of his death. Moreover, when the quantity of stores sent to the East was compared with the deficiencies which existed in Scutari, it was impossible not to harbour the suspicion of his dishonesty

In concluding its report the Committee was of the opinion that the sufferings of the army had resulted from the circumstances under which the expedition to the Crimea had been undertaken and executed. Lord Aberdeen's administration had had no adequate information and was neither acquainted with the strength of Sebastopol nor with the resources of the country to be invaded. It had hoped that the expedition would succeed by coup de main and had not foreseen the consequences of a protracted struggle.

It may have been that Dr. Smith took some comfort from the report insofar as he had not been criticised personally whilst his subordinates, Hall and Menzies had been found guilty of little more than sins of omission. If this was the case then the Army Medical Department stood apart from the other departments of the army for the report contained little that could have brought comfort to the administrators in the War Office or the Department of the Ordnance. A reason for such a lack of understanding of the science of logistics was advanced by Delane in the Times a few days after the report of the Select Committee had been published.

Adverting to a famous observation of the Duke of Wellington that " If there were 50,000 men in Hyde Park then there were only three men in England who could get them out," it asked why the duke had not stopped to consider how much better it would have been if many more had been capable of executing such a task. The great excuse for such a low state of professional knowledge was that under the existing system it would never do an officer the least good to know more than the rest of his comrades. If a man wished for promotion, a wish dear to every soldier, then he was much more in the way to obtain it by good fellowship, by a good position in society, and by making a figure in general conversation than by digging into military annals or by any parade of professional skill. (177)

13. Events in the Crimea, June - September 1855.

Following the death of Lord Raglan, his Chief of Staff, General Simpson was appointed to the command of the army. The general, elderly and arthritic, evinced little enthusiasm for his high office and could not have have filled the Secretary of State with a great deal of confidence about the management of affairs in the Crimea.(178)

I have kept you informed of the events of the last few days by telegraph. You may easily believe the gloom that pervades the camp !

Sir George Brown goes away this morning. Pennefather is gone some days ago. Both decided loss to the army.

The weather is cool, and cholera therefore on the decline. I do not think the deaths from it exceed twenty a day. I dread the return of heat, however, for if cholera becomes epidemic, our men are so worn out they will possibly sink in great numbers.

I beg to call attention to the railroad. It is not answering its purpose, because engineers and navvies have in great numbers refused to work, and it is plain they all wish to leave the country. If the Army winters here, it will be just the same as last year - there will be no road. Two days rain renders it quite impassable for wheels. We have no hands to make roads, which ought now to be in progress. The French are fully employed in keeping up and re-forming their roads, but I see they just put a company or a regiment to work. We cannot do so. I mention the subject, because I foresee what will happen.

As regards the great object before us, taking Sebastopol, we continue working hard; but the enemy works harder. It will be no easy task to enter the place.

The Sardinians are in position on the Tchernaya. They have been sadly used by the cholera.

Omar Pasha is in position further out at Baidar. Canrobert is also on the Tchernaya and I consider these forces safe from attack, and they are in close support should Omar be pressed from the outside.

I feel it very irksome and embarrassing to have to do with these Allies ! No man can equal our lamented Chief in that respect. I sincerely trust, my Lord, that a General of distinction will be sent immediately to command this Army. Circumstances demand that this Army should be commanded by the most eminent and best known soldier we have. With the allies we have to deal with, this is of vital importance. I have put myself in Orders to command until instructions from England shall come; but my health is sure to give way, as I have constant threatenings of gout in spite of all the care I take, and it may come some day too hard for me to bear. I cannot conceal this from my own conviction, and therefore hope soon to be relieved from work that is too much for me. All our Generals fall sick one after the other.

I hope to be excused for entering into these details but they cannot be well given in a public letter.

Admiral Houston believed the despondency felt by Simpson was universal throughout the British camp. The General was a sensible old man but neither sufficiently active nor enterprising for the Crimea. Marshal Pelissier, the French Commander-in-Chief was a great problem to them and likely to become more difficult now that Lord Raglan was dead. (179)

General Simpson's belief that the cholera epidemic was in decline was not borne out by the facts. The numbers of men falling sick had increased steadily throughout April and May, and in June had reached a peak when 1,128 new cases were diagnosed. (180) There was agreement amongst the regimental medical officers that the intense heat of the Crimean summer was playing a part in its spread, as were the insanitary conditions under which the men were required to live and work in the trenches. (181)

Although in the middle of an epidemic the unfortunate Hall was still not free to devote all his energies to combating the infection. Three months earlier Sir John McNeil, the Sanitary Commissioner had noted a shortage of quinine in the General Hospital at Balaclava. This had been brought to the attention of the Secretary of State. Dr. Smith was instructed to inform Dr. Hall that " His Lordship was much displeased at his remissness in allowing the supply of this important medicine to fall short." (182)

It was not the only admonition. Lord Panmure had also found out that Dr. Armstrong, the Principal Medical Officer at Malta, had over-ruled Mr. Thornton, surgeon to the 9th Regiment, and sent thirty men to the Crimea whom Thornton had thought too sickly for such arduous duties. Nineteen of the party had later died from disease. " Lord Panmure suspended judgement on Dr. Armstrong's decision whilst expressing his displeasure at so unfeeling an act on his part." (183)

The Times also returned to the attack after one of its correspondents in the Crimea, Mr. Stowe, died of cholera on 17 June. When the news of

Stowe's death became known the paper upbraided Hall and his colleagues for their neglect of the unfortunate correspondent. (184)

Exposure to the sun, the asperities of camp life, the want of comforts, the desertion of his servant and the consequent necessity of being his own caterer, told quickly on a delicate frame and excitable nature and on the 16th. Mr. Stowe found himself so ill that he applied through a friend for admission to one of the hospitals on the Heights. Owing to the expected influx of military patients an order had been given not to admit civilians, though the pressure was not likely to be so great in the hospital of the Marines, where application was made, and though, through the kind intervention of Dr. Sutherland, everything was done to save trouble to the medical staff, the order was enforced to the letter by Dr. Hall and the result was that Mr. Stowe had to be carried down in the sun on Monday morning to the church in Balaclava, where many others were lying in a like condition. There he received every attention that some kind hand could bestow and at first he appeared to rally but the result is an announcement that he is no more...

When so many men have fallen, it is in vain to lavish more regrets on a solitary example. The event has led to a determination in which we hope to have the concurrence of our supporters. We shall not send out another friend, another valuable life, to a service, in which, among other dangers, British inhumanity is to be encountered. Whoever goes out to administer our fund must expect that, in the event of his sickening in the crowd, and almost everybody there does sicken at one time or another, till he is acclimated, he will be excluded from the hospitals where he is sent to minister, and deprived of the medical aid which he has, perhaps, assisted with the most needful supplies. Helpless and agonised by disease, hundreds of patients have abundantly received and thankfully acknowledged the assistance of the Times Fund. It might have been anticipated that the superintendant would have seized the opportunity of making a generous reply to the animadversions we have had to make on his official administration. This, however, he did not..

The account of the alleged neglect of Mr. Stowe aroused sufficient public concern for the matter to be raised in the House of Commons and this resulted in a demand from the Secretary of State for an explanation. Smith lost no time in writing to Hall; the authorities were again trying to victimise the Department and he hoped that Hall would be able to furnish an adequate reply. (185)

Hall had no knowledge of the case and sought an account of Stowe's death from Staff Surgeon Paynter. Investigation revealed that the unfortunate man had received every attention from Assistant Surgeon Ramsay, attached to the Commissariat of the 4th. Division. He had been examined also by the Principal Medical Officer to the Division and had been offered, but had declined, admission to the camp hospital. Subsequently, he had asked to be taken to Balaclava where he had stayed with the Rev. Haywood. Once in Balaclava he had been visited on the hour by a medical officer until his death two days later, as Miss Wear, matron of the General Hospital in Balaclava had attested. (186)

..the next morning during prayers an orderly came to say that Mr. Stowe was worse. I became much alarmed and wrote off to Dr. Hughes, who was confined to bed on board the Walmer Castle, hastened my hospital business and went to him. I got there between 9 and 10 am. The nurse told me there had been a change since 5 am. I found him greatly altered and with symptoms which left no hope of amendment. A military doctor named O'Conner called, and poor Dr. Hughes left his bed and to my surprise made his appearance looking more dead than alive. Dr. Hughes at once saw that all would soon be over. Dr. Hughes did not leave until all was over. Mr. Stowe was nursed in a large airy room and had everything from the hospital and from me which could be of the slightest use to him.

Once Hall had supplied the information requested by the Director General he wrote privately to Delane not with the intention of reviving discussion of the affair but to satisfy Delane that his colleague had not been neglected. He wrote also in the hope that Stowe's relatives might gain some comfort from the knowledge that their son had been afforded every attention. Miss Wear had retained his possessions for dispatch to England and had cut off a lock of his hair which she would send to his mother. Hall was at pains to point out that Stowe could have been admitted to any of the hospitals in the Crimea, as could any other civilian. He claimed no credit for the attention accorded to

Mr. Stowe but denied that any blame attached to the medical department. (187)

At headquarters General Simpson remained pessimistic about future operations. He had lost two members of his staff from disease. Everyone else was ill with diarrhoea. Omar Pasha was threatening to withdraw his troops. The more he reflected upon the nature of his command the more convinced he became that the Allies would never act in unison until one great man took supreme command. He felt unworthy to be Lord Raglan's successor who, by his great experience, had guided the combined armies. He would continue to work as well as he was able but he had been ill with the gout; the correspondence of the Commander-in-Chief was enough to break any man and he was neglecting his outdoor duties. He had taken over Lord Raglan's establishment so as to enable the work to continue but had made no new staff appointments and would not do so until he knew what was to be determined. (188)

The search for a successor to Lord Raglan had been exercising Lord Panmure for almost a month and yet so few, by want of experience or from age or infirmity, seemed eligible, a point made by the Secretary of State in a report to the Sovereign.

Lord Seaton at 76 years was still robust but would find the rigours of the Crimea too much to bear. Lord Hardinge, the Commander-in-Chief in the United Kingdom, would travel to the Crimea if ordered but was physically unwell and unable to walk. The Duke of Cambridge though not lacking in courage, might be lacking in the coolness and self-possession necessary in a Commander-in-Chief. Sir Harry Smith, by his liability to excitement and his impaired health was also ineligible.

Of the lieutenant generals only one, James Fergusson, newly appointed governor of Gibraltar, presented himself. The greater number of the major generals were already serving in the Crimea but most were incapacitated by illness or injury. The Secretary of State would submit a name for the approval of her Majesty after the next meeting of the Cabinet. (189)

At St. James's Place Smith had now to concern himself with another criticism of the medical department. On 5 July the Times had published an unsigned letter from a serving medical officer who had been on duty during the unsuccessful attack on the Redan. The writer claimed that he had been hampered in his treatment of the wounded by a lack of equipment. He also claimed that the wounded had been neglected by the orderlies and had been left without water for more than twenty four hours. (190)

Smith wrote to Hall three days later enclosing an extract of the letter; it had created a most painful impression throughout the country and again raised doubts about the efficiency of the medical department. He called upon Hall to supply the fullest information. Such a statement required the strictest information to exonerate the parties immediately responsible if the stigma was to be removed from the department, indeed, he had already received a letter on the subject from the Secretary of State. Hall was to assemble a committee immediately and examine and inquire into every detail. The evidence of the medical officers engaged in attending the wounded on 18 June should be taken by the committee and forwarded to the Director General with any observations which the Principal Medical Officer might like

to make on this vexatious but, it was hoped, overstated and inaccurate account of the events of 18 June. (191)

The letter had attracted the attention of the Prime Minister, Lord Palmerston, who wrote to Lord Panmure on 19 July. Lord Panmure was to instruct General Simpson to set up a Court of Inquiry. If the allegations were true then great blame lay with the army medical department, if false, then it would be useful for their falsehood to be established. (192)

The Prime Minister reverted to the letter on the following morning. It was likely that the statement in the Times was exaggerated but it was best not to neglect such things as there was no knowing when they might be brought up as grounds for attacking the government. Lord Panmure should send a copy of his letter to Simpson, but not to the head of the medical staff, and call upon him to inquire into it. (193)

The unknown correspondent found little support from amongst his colleagues. Indeed, one of his colleagues, also on duty on 18 June, was scathing in his criticism. His patients had received everything they wished. They had been given a continual supply of water, in fact, a glut of everything. The writer to the Times, whoever he was, was not telling the truth and his letter was calculated not only to alarm people at home but to damage the service. (194)

Support for Grieg's views on the care of the wounded came a few days later when Dr. Cumming forwarded to London a statement made by thirteen men of the 34th. Regiment, wounded during the attack on the Redan, who testified that they had received every attention. (195)

Further encouragement came from Colonel Lord West, commanding the 57th. Regiment, who had been impressed by the skill and devotion to duty displayed by four of the assistant surgeons, conduct which he now brought to the attention of the Commander-in-Chief in London, Lord Hardinge. (196)

Hall's reply to the criticism was short and forceful. The allegations were utterly false and did not merit further investigation. (197) He was more concerned with the health of the 3rd. Division. The surgeons of the 50th. and 89th. Regiments had complained that the men were being overworked. There was a want of fresh vegetables and Dr. Taylor had reported a case of scurvy. If disease was not to recur it was essential that the men receive adequate food and rest. (198)

In London the Cabinet had now decided to confirm General Simpson in the post of Commander-in-Chief, a decision conveyed to him on 20 July. The Secretary of State informed him that he had been promoted to Lieutenant General. He had the confidence of the Cabinet, though he, Lord Panmure, had been much shaken by the desponding tone of the general's correspondence. Lord Panmure would now send him a Mr. Jackson who would assist with his correspondence. The General was to anticipate the needs of the winter and attend to the accommodation of the troops. In particular, the road between Balaclava and the British camp was to be kept open at all costs. (199)

General Simpson hastened to reply to the Secretary of State. His staff had been unable to decipher all Lord Panmure's telegraphic dispatch but had deciphered sufficient to note that he had been confirmed in his post. He regretted the despondent tone of his previous letters and

could only hope for health and freedom from gout. He had appointed General Markham to the command of the 2nd. Division and Colonel Pakenham to the post of Adjutant General. The correspondence at Headquarters was beyond him but he would do his best to keep Lord Panmure informed of all that was going on. (200)

Lord Panmure's next letter was less cordial in tone. He was aware of the responsibility borne by General Simpson but he should either buckle to or retire. If he chose to retire Lord Panmure was determined that Sir Richard England should not succeed to the command of the army. He enclosed a dormant commission naming Sir William Codrington as Simpson's successor. The army would be strengthened with 3,000 men from the Foreign Legion and this, with other additions, would give the English commander added weight which the allies would be forced to respect. The Secretary of State now hoped to see a blow struck against the Russians which would signalise General Simpson's tenure of the supreme command. (201)

By August it seemed probable that the allies would spend a second winter in the Crimea and Smith wrote to the Under Secretary at the War Department drawing his attention to the precautions which should be taken if the incidence of disease was not to reach the heights of the previous winter. An adequate supply of fuel was needed; much of the sickness of the previous winter had resulted from the want of it. The men ought to be permitted sufficient rest. Warm clothing and an adequate diet were essential. The uniforms issued to the troops should protect them from the cold and wet. They needed waterproof boots if they were not to suffer frost bite. Those on duty in the trenches

required extra rations and a generous supply of porter or spirits.(202)

Smith was also concerned about the morale of the medical officers attached to the expeditionary force and wrote to the Under Secretary at the War Department to express his disappointment at their exclusion from the rewards and decorations given to others in the Crimea. They were exposed to the same dangers and hazards as the fighting troops and faced the special hazards of disease. Their exclusion had caused great discouragement amongst the doctors. He did not believe that it would affect the quality of the service which they provided to the troops but hoped they would not remain undistinguished at that account.

He felt it would be unjust if he remained silent on the subject when the services of Doctors Hall, Dumbreck, Linton, Forrest, Alexander and others went unrecognised. Once the morbid excitement aroused by the misrepresentation of the press had died down, he felt sure the public would applaud the recognition of their services as would the men now suffering from wounds or diseases. Besides, the award of suitable decorations would help remove the impression, obtaining in civil medical practice, that to enter the Army Medical Department was only to seek contumely and disgrace.(203)

Despite the Russian victory of 18 June, conditions within Sebastopol were worsening every day and Tsar Alexander (204) began to seek ways of extricating his forces from what had become the pointless defence of a ruined city. Reasoning that another victory might bring the allies to the negotiating table he urged that a final battle be engaged and the

enemy swept from the heights before Sebastopol. But he too, like the British Secretary of State for War, was dealing with a tired and dispirited Commander-in-Chief who, on 8 July, had declined to take further offensive action:

If I were to attack the enemy I would be smashed by the third day with the loss of between 10,000 and 15,000 men. On the fourth day Sebastopol would be lost. But, if I do not attack, the enemy will take Sebastopol anyway in the course of the next few months, and your obedient servant will be back between Perekop and the Dnieper. (205)

Despite Prince Gorchakov's pessimism the Tsar believed that a final offensive was essential:

I am convinced of the necessity that we should attack; otherwise all the reinforcements recently sent to you, as has happened in the past, will be sucked into Sebastopol, that bottomless pit. According to information received by me, the allies will storm the base by land and sea during mid August. Therefore it is much to be desired that, with the arrival of the 4th. and 5th. Infantry Divisions, you will not delay undertaking decisive operations. You cannot avoid significant losses, but, with God's help, you may achieve a momentous result. (206)

Three days later he renewed his demand for action. Prince Gorchakov's account of his daily losses inside Sebastopol gave weight to all that he, the Tsar, had written in his letters. The necessity was to do something to stop the frightful massacre. If the Prince feared the responsibility then he should summon a council of war and allow its members to take the decision. (207)

In obedience to the Tsar's instructions Prince Gorchakov summoned the council on 9 August and, after a prolonged and angry debate, resolved to mount an offensive against the French positions on the Fedukhin Heights.

At 8 am. on 16 August Russian troops moved down in great numbers from the Mackenzie Heights and began to cross the Tchernya river at the site of the Traktir bridge. Here they were opposed by a combined force of French and Sardinians and, in a battle lasting little more than two hours, were driven back with heavy losses. In his dispatch to Moscow, written on the following morning, Prince Gorchakov sought to blame his subordinate, General Read, for the reverse. He complained that conditions were going from bad to worse and that the allied bombardment would surely soon force the evacuation of the town.(208)

14. The capture of the Malakov; the assault on the Redan and the evacuation of Sebastopol, 8 September 1855.

By 3 September the siege works to the front of Sebastopol had reached the stage when an assault on the town seemed to hold some promise of success and in accordance with instructions given by both allied Commanders-in-Chief the senior officers of artillery and engineers drew up a plan of attack.

There was to be a preliminary bombardment lasting three days. The principal thrust of the French attack would then be directed against the Malakov Tower. If this were secured then the fall of the Karabelnaia suburb would be inevitable. The Russians were constructing a second enceinte (enclosure) between the Malakov and the Little Redan but this was incomplete and would be easily surmounted.

The attack on the Malakov would be carried out by French troops formed up in three columns. The first, sallying from the trenches nearest the strongpoint would attack it directly. The second would leave the

trenches nearest the Little Redan, scale that work and then gain the second enceinte. The third (centre) column would leave the 6th. parallel and march directly to the curtain wall. Once the wall had been scaled it would move to the left and attack the Malakov from the side. The objective of all three columns was to gain and hold the Malakov against all subsequent counter-attacks.

Once the Malakov was secured the British would attack the Redan. The assault would be carried out by three columns. That on the right would pass by the slope to the left of the ravine by the Karabelnaia; that in the centre would move directly towards the salient and that on the left would pass by the right slope of the Great Ravine.

It was the view of the engineers and gunners that a date should be fixed without delay since any postponement would diminish the chances of success. (209)

Dr Hall wrote to his Director General on 7 September. A general assault had been ordered for the next day. He had ridden round the Divisions and inspected the preparations which had been made for the care of the wounded. There was spare accommodation for almost 1,300 men and three hospital ships were standing by to receive casualties, the Severn with 120 berths, the Poictiers with 100 and the Imperator with 120. (210)

In anticipation of the attack Hall issued a departmental memorandum. The Principal Medical Officers of Divisions were to take all steps necessary to ensure the safety of the wounded. The Light and Second

would be most engaged and Drs. Alexander and Gordon were to make all necessary preparations. A temporary (tented) hospital was to be erected in the Worontzov Ravine to which the wounded would be brought initially. Here, Dr. Gordon would ensure that there was an ample supply of water and restoratives. All medical officers of the Divisions would be on duty at the front. One medical officer from each regiment would follow the troops into the trenches. Staff Surgeon 1st. Class Home would take charge of the medical arrangements in the Right Attack. Staff Surgeon 1st Class Paynter would take charge of arrangements in the Left. Deputy Inspector General Taylor would take charge of the temporary hospital in the Piquet House, as he had done on 18 June, and Staff Surgeon Roberts would be on duty in the Ravine to the front of the 4th. Division. Ambulance waggons, mule chairs, and litters would be available in each ravine, together with Croat bearers who would carry the wounded from the battle field to the ambulance waggons. (211)

The assault began shortly after 12 noon. General MacMahon lead his Zouaves and Chasseurs across the open ground to the ditch in front of the Malakov where they threw scaling ladders against the walls. In less than three minutes the first troops had entered the strong point taking the defenders by surprise. Fierce hand to hand fighting followed but within another fifteen minutes the Malakov was in the hands of the French.

Marshal Pelissier, observing the attack from the Mamelon, now ordered the tricolour to be flown, the signal for the British attack on the Redan to begin. On seeing it General Simpson ordered four rockets to be fired in order to attract the attention of the commanding officers of the assault regiments. The flag of St. George, the signal to advance,

was then hoisted. On seeing the flag the scaling and ladder parties ran across the open ground to the ditch in front of the Redan followed closely by the main body of troops. All were now exposed to a galling fire from the Russian guns mounted on and around the strongpoint. Pressing forward the assault party quickly entered the outer defences of the Redan but once inside were pinned down by the fire of large numbers of Russians positioned to the rear. Within a short time the majority of the officers and n.c.o's had been killed or wounded and the troops, mostly young and inexperienced, began to lose heart. The few officers remaining attempted to lead them in a bayonet charge but within minutes most were falling back in disorder. (212)

Since the French troops to the left and right of the Malakov were faring no better the success of the attack now depended upon General MacMahon's troops holding what they had already gained. The general seemed in little doubt that this could be done and asked Captain Biddulph to tell General Simpson that all would be well. " Vous pouvez dire au General Simpson que j'y suis et j'y reste." (213) In the event MacMahon's confidence was justified for the French troops, securely established within the fort, resisted all efforts by the Russians to dislodge them.

To their left the British troops were crowded into the advanced trenches but there seemed little possibility of them making a second attack. The failure of the British assault cast a great gloom over the camp and though General Simpson sought to gloss over the behaviour

of his troops, (214) their reluctance to respond to the commands of their officers was seen by some as an act of cowardice and by others as a failure in training and leadership.

I can only account for the sad conduct of the men thus; first they are almost all young soldiers and many of the officers being young have but little influence over them. Taken from perfect peace and quiet in England to the trenches of Sebastopol, they have been taught to look for shelter and not expose themselves to fire. (215)

Captain Sir Charles Russell, on his return to England, took a more charitable view. (216)

I cannot help saying a word about the Redan for it is a point upon which I feel deeply. I, myself, witnessed the assault and have since been over the whole of the fortifications, and I can solemnly assure you it was not possible for men to take it. They were mown down and swept away by the guns which commanded the approaches on all sides. No man could stand against it. Our soldiers did their duty nobly and did all that men could do, and I do not hesitate to say that no men on earth could have taken it.

Within Sebastopol the loss of the Malakov finally signalled the end of the siege for the strongpoint was the " Citadel and key to the fortress." (217) Prince Gorchakov now took advantage of the fact that the allies were in an exhausted state and began to evacuate the garrison via the bridge of boats spanning the roads from the dockyards to the northern shore. Men began leaving at 5 pm. and continued crossing the bridge throughout the night until more than 30,000 had left the ruins. The bridge was then blown up by the Russian engineers who, after demolishing all the buildings still standing after the allied bombardment, left the fortress in naval cutters.

The first signs that the Russians were leaving came in the early hours of 9 September when Corporal Ross of the Royal Sappers and Miners, his

curiosity roused by the lack of noise and movement from within the Redan, crawled from the 5th. parallel to the strongpoint and found it empty, save for the dead and dying. By daylight it was apparent that the Russians had withdrawn and the full extent of the destruction within the city was, at last, evident to its attackers.

Every house, church, public building, all alike were broken and riddled by cannon and mortar, but of all the pictures of the horrors of war which have ever been presented to the world, the hospital at Sebastopol offered the most heartrending and revolting. The building used was inside the dockyard wall and was peculiarly exposed to the action of shot and shell bounding over the Redan; it bore in sides, roof, windows and doors proof of the severity of the cannonade. Entering one of these doors I beheld such a sight as few men, thank God, have ever witnessed. In a long low room supported by square pillars arched at the top, and dimly lighted through shattered and unglazed window frames lay the wounded Russians. The wounded did I say? No, but the dead - the rotten festering corpses of the soldiers, left to die in their extreme agony, untended, uncared for, packed as close as they could be stowed, some on the floor, others on the wretched trestles and bedsteads, sopped and saturated with blood which oozed and trickled through upon the floor, mingling with the droppings of corruption. (218)

The British wounded had fared better and in his report to the Director General, Hall complimented his subordinates. Most of the wounded had been brought out in the course of the afternoon and those too near to the Redan to be attended to in daylight had been brought in after dark. There had been many casualties but the wounds received were less serious than those inflicted in the previous attack on 18 June. The ambulance waggons had worked efficiently under the superintendence of Captain Piggott, who had testified to the steadiness of the drivers. Hall concluded his letter by writing that he could not speak too highly of the conduct of all the medical officers, both civil and military, in their exertions on behalf of the wounded. (219)

On the day after the fall of Sebastopol General Simpson issued a general after-order. He congratulated the army on the result of the attack and extended his thanks to the general officers, officers and men of the Second and Light Divisions who had attacked with such gallantry. He regretted the formidable nature of the flanking defences of the Redan as a consequence of which the gallantry of the two divisions had not met with the success which it so well merited. He condoled with the brave officers, non-commissioned officers and men who were suffering from wounds received in the course of their exertions and deplored the deaths of those who had fallen in the struggle. Their loss would be severely felt and their names long remembered. (220)

The cost had, indeed, been high. Between April 1854 and July 1856 upwards of 100,000 men from the United Kingdom, both combatants and non-combatants, had taken part in the operations of the expeditionary force in Turkey, Bulgaria and the Crimea. In the fighting which had taken place between September 1854 and September 1855, 2,755 officers, non-commissioned officers, and men had been killed. During the same period more than 12,000 officers, non-commissioned officers, and men had been treated in the British military hospitals for wounds received in action, of whom 1,840 had died. (221) But if the losses in battle had been high the morbidity and mortality resulting from the infectious diseases had been even higher. Between April 1854 and July 1856 155,000 officers, non-commissioned officers, and men had been admitted to the various military hospitals both in the Crimea and in Scutari, of whom more than 16,000 had died. (222)

15. Life in Sebastopol October 1855 - July 1856: the Treaty of Paris and the evacuation of the Crimea.

With the Russians established on the northern shore and the Allies occupying the ruins of the city, the campaign in the East was almost at an end. Plans for other military enterprises were advanced but only one, the seizure and destruction of Kinburn, 100 miles to the west, was carried out. On the cessation of hostilities large numbers of English officers applied for leave to visit the United Kingdom while the enlisted men, denied such privileges, sought consolation in drink. However, despite the alarming increase in drunkenness, the health of the British troops was now greatly improved. With a reduction in the numbers of sick being sent to Scutari the flow of patients to the civil hospitals at Smyrna and Renkioi ceased leaving the civil medical practitioners with little to do beyond explore the surrounding countryside.(223) The improvement in the health of the troops also freed Miss Nightingale from her duties in Scutari and enabled her to revisit the Crimea where, by her autocratic manner, she antagonised the medical staff and brought about the resignation of the matron and nurses from the General Hospital at Balaclava before sailing for the United Kingdom in July.(224)

Life for the British expeditionary force now assumed an unaccustomed domesticity. The enlisted men, well fed and clothed, were all accommodated in wooden huts and were, at last, freed from the rigours of duty in the trenches. The officers, also freed from routine, occupied themselves in the traditional pastimes of the English country gentlemen. Race meetings between regiments were held; a form of hunting, in which wild dogs rather than foxes were pursued, became

popular, and expeditions to the interior of the country in search of game and wild fowl were organized. By tacit agreement the British ceased to fire on the Russian positions to the north and the Russians refrained from shelling Sebastopol.

With the end of hostilities the strains on the Anglo-French alliance became more evident and whilst it might have been to Britain's advantage to continue the war, it was soon apparent that Napoleon III had no intention of wasting more French lives in a struggle which could bring little benefit to France.

Tsar Alexander was no less anxious for peace and was in any event under pressure from Austria and Prussia to find a settlement. After some weeks of preliminary negotiation a peace conference was convened in Paris on 25 February. Five weeks later the Treaty of Paris was signed with the Great powers undertaking certain agreements. Britain and Russia were to respect the integrity and independence of Turkey; the Sultan was pledged to introduce reforms within the Ottoman empire. The Black Sea was to be neutralised and no Russian warships in excess of 800 tons were to travel over or be moored on its waters. The naval fortifications at Sebastopol, Kherson, Nikolayev and Odessa were to be demolished and a European commission was to supervise the navigation of the Danube. The Danubian Principalities were no longer to be under Russian protection, the fortress of Kars was to be returned to the Turks and a strip of Bessarabia was to be ceded by Russia. (225)

Once the peace treaty was signed the Allies and the Russians were free to fraternise and on 17 April a grand revue was held at which the Russian Commander-in-Chief, General Luders, took the salute.

Thereafter, English officers were frequent visitors to the Russian camp and Dr. Hall took the opportunity to send two medical officers, Doctors Mouat and Wyatt, to investigate the ways in which the Russian doctors had cared for the sick and wounded during the siege.

After establishing contact with the senior medical officer, Dr. Reisky, they visited the Russian headquarters to the north, the camp hospitals on the Mackenzie Plateau and the large military hospitals at Baktchiserai and Simpherol. Their report revealed that the Russian medical staff had undergone many experiences which were comparable to those of the English doctors but it also revealed some differences, particularly in the patterns of disease.

From the beginning of the siege there had been insufficient transport to cope with the large numbers of sick and wounded despite the arrangement by which all Russian families were obliged to supply for military use one cart, filled with grain, three horses, a driver and four oxen. Each regiment was allocated six heavy waggons and it was these waggons which were used to carry as many as 500 sick and wounded a day from Sebastopol.

The Russian doctors were at a loss to compute the numbers of soldiers and sailors who had died in the siege but believed it to be in excess of 300,000. (226) Nonetheless, despite the heavy mortality from infectious disease they had not been troubled by cholera; the greater number of deaths resulting from fever, frequently complicated by dysentery. Moreover, the

Russians had not suffered any shortage of meat or fresh vegetables and had not, therefore, suffered from scurvy.

The physical appearance of the Russian soldiers compared unfavourably with that of the British; a great number seemed to be prematurely aged and while many were of above average height, few exhibited the muscular development common among the soldiers of the expeditionary force.

In the matter of clothing the Russian uniforms were of surprisingly good quality and the authorities had made provision for a change during the summer months.

Doctors Mouat and Wyatt judged the Russian medical staff to be intelligent and adequately trained in the techniques of medicine and surgery. They noted that they too had been subjected to a great deal of unmerited criticism for failing to achieve that which was beyond their reach, as, for example, when a senior Russian medical officer was admonished and demoted for having on his wards quantities of impure quinine, though he had had no control over its manufacture or supply. Moreover, as was the experience of the British medical staff, the Russian medical officers were seldom consulted about the welfare of the troops or about the desirability of a particular camping site. They were, however, called upon to deal with the various epidemics which broke out, the authorities then exclaiming, "Messieurs, fautes votre medicine."

At the height of the siege there had been some shortages of linen and drugs but the sanitary state of the Russian hospitals had never reached the deplorably low level common in the British military

hospitals despite there having been much overcrowding. Furthermore, the losses during the journey from Sebastopol to the base hospitals had been as high as those amongst the allies on the journey from Balaclava to Scutari.

It seemed that the conditions of service for the Russian medical staff were much the same as those in Dr.Smith's department though the Russian doctors were permitted to retire on full pay after thirty years, a privilege not enjoyed by their British colleagues.

Nursing care had been provided by the Sisters of Mercy, generally widows of officers, a body of women highly thought of by the Russian medical staff. The wounded had had the advantage of being treated by M.Peregov, a distinguished Russian surgeon sent from St.Petersburg by the Tsar, who had been assisted by a number of German and American doctors. The Russian staff had been much overworked and no fewer than 140 had died.

The Russian surgeons had carried out more than 10,000 capital operations; 3,000 amputations had been performed and in those cases where an arm had been removed, half the patients had survived. The mortality for amputations of leg and foot were similar but amputation of the thigh carried a greater mortality. Most of the deaths had resulted from secondary infection, a complication which had killed almost all of the patients unfortunate enough to have suffered penetrating wounds of a body cavity. (227)

With the end of the siege of it was also possible to learn a little about the problems which had beset the French medical department during the campaign. More than 300,000 French troops had been sent to the East, of whom 8,400 had been killed in action, 11,700 had died of wounds, and 75,000 had died from disease.

Initially regarded as better organised and more efficient than the British, the French doctors had come under greater and greater pressure as the French army had assumed an increasing share of the work of the siege. At the time of the landing in the Crimea fourteen hospitals had been opened in Scutari and as time went on it was necessary to open another three. Moreover, the high incidence of disease had continued after Sebastopol had fallen. Thus in the first three months of 1856 the numbers of patients admitted to the French hospitals in Scutari had ranged from 13,000 to 21,000, of whom more than 10,000 had died. In the same period more than 5,000 French soldiers had died on board ships bound from the French base at Kamiesch while another 25,000 had died in the Crimea. Thus in total, during the first three months of 1856, 40,000 men had died from disease, mostly from typhus.

Of the 362 surgeons attached to the French expeditionary force no fewer than 72 had died from typhus alone and of the 840 orderlies employed in the French military hospitals more than 600 had been laid low by the same disease.

Certain conditions prevailing in the French hospitals were thought by the British observers to have facilitated the spread of disease, notably overcrowding, indifferent food, and poor sanitation. Bedding and night clothing had remained unchanged for long periods and as

one patient died his bed had been taken by another within minutes. Doctors Mouat and Wyatt were at pains to point out that no one who had witnessed the conduct of the French surgeons could have doubted their courage and devotion to duty but they, like the British and Russian doctors, had been overworked and unsupported. Moreover they, too, were only permitted to advise on the treatment of patients and had no authority to order improvements in, say, sanitation or ventilation, the responsibility for such matters resting with the military authorities. (228) (See also Appendix 4.)

Once the peace treaty had been ratified on 29 April 1856 the evacuation of the British expeditionary force began with the repatriation of the Army Works Corps and the Siege Train. Relations with the Russians were now cordial and contrasted strangely with those which existed with the French. These had deteriorated markedly since hostilities had ceased, so much so that in April a number of French soldiers were charged with the murder of a British sergeant of Marines and the wounding of an English naval lieutenant at Kasatch. (229)

By early May a number of regiments had embarked for Canada and the Turkish and Sardinian contingents were being repatriated. The Balaclava railway had been dismantled and sold to the Turkish government as had a number of artillery horses. Nonetheless, more than 40,000 men remained until a fresh outbreak of cholera in the British camp injected a note of urgency into the proceedings. The admiralty were then persuaded to make an exception to their regulations and permit the transport of troops on board ships of the line. By this means the evacuation was speeded up and by 12 July

the last of the British troops had been embarked, having been preceded by the French a week earlier.(230)

The return of the expeditionary force saw scenes of great rejoicing as sergeant Timothy Gowing recorded.

We at once landed and marched to the railway station. Or, rather, we eventually found ourselves there safe, for how we got there it would be difficult to say - one would have thought that the good people had gone mad ! They had witnessed hundreds come home from the seat of war maimed in a most frightful way, mere wrecks of humanity. They had now got hold of the men they had read so much of. In their excitement they lifted us right out of the ranks and carried us on their shoulders through the streets, which were packed by thousands of people who were determined to give us a cordial welcome. They wanted to kill us with kindness, for, as soon as they got hold of us, it was brandy in front of us, rum to the right of us, whisky to the left of us, gin in the rear of us, and a cross fire of all kinds of ales and lemonades. (231)

The Brigade of Guards made their entry into London on 9 July, having previously been inspected by their Sovereign and when the divisional commanders, brigadiers and colonels of regiments arrived all were rewarded for their services. One, the Duke of Cambridge, was promoted to full general and appointed to succeed the ailing Lord Hardinge as Commander-in-Chief. Perhaps in response to Dr.Smith's plea on their behalf, the senior medical officers of the expeditionary force were also rewarded, Dr.Hall receiving the K.C.B and Deputy Inspector Generals Dumbreck, Linton, Forrest, Alexander, Taylor, Gordon and Mouat the C.B.

But to the regret of at least one regimental officer the enlisted men were treated with less charity.

My next duty was, indeed, a melancholy one, for I was appointed member of a board for the discharge of one thousand men of the Brigade, with whose fortunes and services I had for the last two years been so closely associated. It was sad to have to sit day by

day for upwards of a fortnight, signing documents which turned loose upon the world, without pension or gratuity, men who had become fully qualified to take the field anywhere as soldiers. Before many weeks were over, many of these good fellows were wandering penniless and without employment throughout the country, illustrating with painful accuracy the truth of the bitter reflection with which Sir William Napier concluded his story of the Peninsular war. (232)

Dr. Smith, too, had to wait until his retirement in July 1858 before receiving a knighthood and even then, despite his vindication in 1855 by the Roebuck commission, the Times made use of the occasion to launch one final attack upon him.

Dr. Andrew Smith, the Director General of the Medical Department of the Army, has survived all the attacks that have been made upon his administration and now, in a green and lively old age, is to be rewarded for his eminent services by the honorary distinction of K.C.B. A little more than three years ago, when public indignation was at its height, the medical arrangements for the army were felt to be so deplorably bad that Dr. Smith was announced to be only holding office till his successor was appointed. Something had been done and the public were satisfied. Peace was proclaimed. The necessity for action was not so urgent. Weeks, months, years rolled by and Dr. Smith remained Director General. He is to be shelved at last, and consigned to a splendid insignificance. As far as the army medical department is concerned, it is well, for the administration of its affairs will pass in to younger, more capable, and more vigorous hands. But might not this end have been accomplished without again sullyng those high distinctions which, it used to be supposed, were reserved for pre-eminent merit. Of Dr. Smith personally, had he been content to retire quietly from the busy stage of life into that chiaroscuro which should ever be interposed between human affairs and the grave, we would not have said one word. It is his own fault, however, for he has sought a distinction which will cause his public career to be investigated in a critical, perhaps not in a friendly spirit. It is the fault of injudicious patrons and friends if they have thrust upon him honours which he has neither coveted or earned. (233)

Such an unmerited attack must have seemed to Smith, by nature a modest and self-effacing man, a poor return for a life time of unremitting labour in the cause of army medicine and the health of the common soldier.

16. Summary and conclusions.

The declaration of war on 28 March 1854 found the Army Medical Department as unprepared for hostilities as the other departments of the army. Furthermore, when the Director General, Dr. Andrew Smith, received instructions to provide the medical staff and equipment necessary to meet the needs of an expeditionary force of 10,000 men he was handicapped by the lack of any useful information in the medical archives. Nevertheless, he lost no time in selecting the officers and requisitioning the drugs, medical equipment, hospital stores and medical comforts which he believed would be necessary. He also nominated the Principal Medical Officer in Malta, Dr. Burrell, as senior medical officer to the expeditionary force.

A few days after receiving his first instruction he was informed that the size of the expeditionary force had been increased to 30,000 men. This necessitated a three-fold increase in the scale of his requisitions, an increase in the number of medical officers detailed for service, and required him to nominate an officer of greater seniority than Burrell as senior medical officer. He chose Dr. John Hall, then serving in India as an Inspector General of Hospitals.

As preparations continued he was asked by the Military Secretary to submit details of the ways in which he intended to transport the sick and wounded from the field of battle. Within a few days of receiving this instruction he had submitted plans for a two wheeled and a four wheeled ambulance waggon based upon the designs of Mr. Guthrie, formerly President of the Royal College of Surgeons. His designs were accepted by the authorities but altered later by the engineers of

the Ordnance Department, who insisted that the waggons be fitted with gun carriage wheels. This modification was unhelpful in that the additional weight of the wheels made the vehicles unsuitable for use over rough ground.

When Dr. Smith learned that the expeditionary force might be sent to Bulgaria he sent three senior medical officers to various parts of that country with instructions to collect information about the diseases which would be encountered. When, a few weeks later, he received the first reports from the three officers these indicated that large tracts of the country were unhealthy, especially in the summer months when fevers of all kinds were prevalent. He immediately informed the authorities of the hazards which would be met and urged that the troops be issued with more suitable uniforms. He was told that such changes could not be made at such short notice.

In offering his professional opinion to the War Department on other aspects of medical care, he pressed for the formation of a hospital corps made up from able bodied men of good character and also urged that a number of sea going vessels be fitted out as hospital ships. His advice on both matters was ignored. The failure by the authorities to act upon this advice had serious consequences for the sick and wounded in the months to come.

When planning the medical care of the expeditionary force the Director General estimated that he would need to provide hospital places for 3,000 patients. In the first instance the General Hospital in Scutari, a building with space for about 650 beds, was given to the Army Medical Department by the Turkish authorities. Later, they also

released the Turkish Barracks, renamed the Barrack Hospital, half a mile distant from the General Hospital. The building was of great size and had space for several thousand patients, but was unsuitable for use as a hospital, having no laundry, inadequate kitchens, and only limited sanitary facilities. Once in use a particular problem was presented by the small bore pipes used in the construction of the privies; these were soon blocked because the British troops, being careless in their habits, threw rags and other debris into them.

From May onwards, on instruction from the Director General in London, Dr. Menzies, the senior medical officer in Scutari, attempted to bring the Turkish Barracks into commission. He was obstructed at every turn by Mr. Ward, the senior purveyor, when he tried to obtain equipment and ward furniture. Menzies appealed to the military authorities for support but his request was ignored by those who might have exerted the necessary influence.

The failure by the authorities to respond to Menzies's plea for help had serious consequences once the sick and wounded from the Crimea began to arrive in Scutari.

In making provision for the medical needs of the army in the East, the Director General was much hindered by the system of requisitioning. This was of byzantine complexity and, save in the case of drugs, meant that Dr. Smith had no authority to buy equipment directly from manufacturers. The need to rely on the Department of the Commissariat both in London and in Scutari proved an especial weakness in the system. Moreover, having obtained equipment from the Commissariat, Dr. Smith was then required to apply to the Admiralty for its transport to the East.

This frequently resulted in delays of weeks or months. It also resulted in much medical equipment being lost or mislaid.

The lack of executive authority, a reflection of the lowly status of the army medical department within the military hierarchy, did not just present problems for its Director General but made the task of all the medical officers accompanying the expeditionary force more difficult. Thus, while charged with the welfare of the sick and wounded, they could not, for example, order repairs to the fabric of a hospital or discipline a hospital attendant. This lack of authority in matters connected with hospital administration resulted in much unnecessary suffering for the patients, particularly when those in authority were weak and unsure of themselves, as was Major Sillery, Military Commandant at Scutari. It was also eroding to the morale of the doctors and resulted in many of them refusing to concern themselves with anything save the prescription of drugs and diets or the surgical treatment of individual patients.

The morale of the medical officers was further eroded by the autocratic and insensitive attitude of those in authority over them, as instanced by Lord Raglan's public reprimand of Dr. Lawson for his alleged neglect of the patients on board the Avon. It seems likely that such insensitivity reflected the low esteem in which the doctors were held by the officers in the Crimea holding high command, most of whom were, themselves, of aristocratic birth. Such perceptions took little account of the educational attainments of the medical officers (which in general exceeded those of officers in other branches of the service) being rather a reflection of a social attitude which viewed medicine more as a demeaning craft than an honourable profession.

During May the troops of the expeditionary force were camped in and around Scutari and were in excellent health when, in early June, Lord Raglan and Marshal St.Arnaud decided to move their armies from Turkey to Bulgaria in order to go to the assistance of the Turks in Silistria.

The armies landed at the Black Sea port of Varna and were soon camped in and around the town. Once in Bulgaria, as Dr.Smith had predicted, the health of the troops deteriorated and the incidence of fever rose sharply. Then, to add to their sufferings, on about 15 July, a number of French troops of the 5th.Regiment of the line, arriving by sea from Marseilles, were stricken with cholera. Thereafter, the disease spread rapidly through both armies.

The medical staff were strenuous in their efforts to combat the infection but were handicapped by their ignorance of the manner in which the disease was spread. As a consequence the level of sickness amongst the troops rose so sharply that by August more than 8,000 men were being accommodated in the various staff and regimental hospitals at Varna and Scutari.

By this time the allied commanders were being pressed to invade the Crimea in order that the Russian naval base at Sebastopol might be seized and destroyed. Although they possessed little information about the terrain and none about the strength and disposition of the Russian forces in the Crimea, both commanders agreed to the enterprise.

As preparations for the invasion proceeded it was necessary for Dr. Hall to close all the hospitals in Varna and to transfer more than 1,000 sick to Scutari. The arrival of so large a number of patients meant that all the existing hospital accommodation in Scutari was taken before the expeditionary force set out for the Crimea. The shortage of medical and nursing equipment, already acute, was then further exacerbated by Admiral Boxer's failure to arrange for the great quantity of medical equipment which had accumulated in Varna to be taken back to Scutari.

On 14 September 1854, after an uneventful voyage from Bulgaria, the allied armies landed at Calamita Bay, thirty-five miles north of Sebastopol. Contrary to the expectations of the allied commanders the health of their troops did not improve with the move from Bulgaria. Rather, because the epidemic of cholera had not run its course, the allied armies took the disease with them to the Crimea.

When dis-embarking from the transports the British troops were not permitted to carry their knapsacks. Because of the many demands upon the naval authorities it was then several weeks before they could unload these at Balaclava. During this time the troops had neither bedding nor a change of clothing. To add to their many discomforts they were also without tents until the middle of October.

As a result of the administrative confusion which prevailed at the time of the landing, the regimental medicine chests and the ambulance waggons needed by the medical staff were not unloaded. This oversight by the naval authorities resulted in much unnecessary suffering for the sick and wounded in the weeks that followed.

Three days after landing in the Crimea the first engagement of the campaign was fought at the river Alma. Subsequently the lack of ambulance waggons was much felt and, as each wounded man had to be carried to the beach on a stretcher, in some cases a distance of five miles, the evacuation of the casualties took three days. Once on the beach the wounded were taken on board ships which lacked all facilities for the care of the sick. It was the suffering endured by these casualties during the voyage to Scutari which prompted Thomas Chenery to write his dispatches to the Times criticising the Army Medical Department.

Three days after the battle at the river Alma the allies resumed their march on Sebastopol but on reaching the fortifications to the north halted at the insistance of Marshal St.Arnaud. He expressed the view that the naval base was too heavily defended to be taken by direct attack and urged that a formal siege be mounted from the south.

As this view was shared by General Burgoyne, Chief Engineer to the British expeditionary force, Lord Raglan acquiesced to the change in plan. The armies marched round Sebastopol and lost contact with the allied fleet until they reached the small fishing village of Balaclava, seven miles to the south of Sebastopol, two days later.

Lord Raglan then decided that Balaclava would become the base from which the British army would mount its operations against Sebastopol while the French established themselves in the fishing village of Kamiesch, four miles nearer to Sebastopol. The decision to use Balaclava as a base had unfortunate consequences for the expeditionary force in that its harbour was too small and too narrow of access to serve the needs of 30,000 men. Moreover, only one road ran from it in the direction of

Sebastopol and when, with the onset of winter, this became impassable the supplies for the army piled up on the quayside in Balaclava while the men of the expeditionary force starved on the heights before Sebastopol.

By November the allies had established their siege works to the south of Sebastopol with the French on the left and right and the British in the centre. Prince Menshikov, under pressure from the Tsar, then decided to attack the British position on the Inkerman Ridge. On Sunday, 5 November, a large force of Russian soldiers moved down from Bakchiserai towards the Inkerman bridge while a second ascended the ridge from the Korabelnaia suburb of Sebastopol. In a battle lasting six hours the Russians were defeated by the troops of the 1st and 2nd Divisions.

On 14 November the Crimean winter began with a storm of unprecedented ferocity which caused great destruction within the British camp. It also sank a number of transports moored in and around Balaclava. Among the vessels lost was the steamship Prince newly arrived off Balaclava with large quantities of winter clothing for the expeditionary force.

The troops were then exposed to the rigours of the winter and, because they were over-worked, under-fed, inadequately housed, and clad in rags, were soon displaying the symptoms of malnutrition and exposure. Having few resources in the Crimea Dr. Hall could do little beyond evacuate as many men as possible to Scutari.

Unfortunately for the sick and wounded soldiers of the

expeditionary force so many men were sent that for some weeks during November and December the military hospitals in Scutari seemed on the point of collapse. However, by January 1855, through the efforts of Miss Nightingale, Dr. Cumming, the new Principal Medical Officer in Scutari, and Lord William Paulet, the new Military Commandant, order was restored.

In the Crimea the siege proceeded slowly and despite heavy and repeated bombardments the Russian resistance showed no signs of weakening. Then, as winter gave way to spring, the health of the troops began to improve. By June the allies were concentrating on preparations for an assault on the various Russian defensive positions which surrounded Sebastopol. After a preliminary bombardment lasting six days, the assault was mounted on 17 June. The British attacked the Redan and the French the Malakof but both attacks were repulsed with heavy losses. Shortly afterwards Lord Raglan died and the command of the expeditionary force passed to General Simpson, formerly Chief of Staff to the expeditionary force.

With the return of the warmer weather cholera again broke out amongst the troops and was especially destructive towards those newly arrived in the Crimea. Nevertheless, by June the men were well fed, housed in wooden huts, and adequately clothed and, despite the recurrence of cholera, far fewer fell sick than in the previous year. Moreover, conditions for those who did fall ill were also much improved since they were transported from the British camp to Balaclava in ambulance waggons along metalled roads and, once in the village, were loaded on to vessels fitted out as hospital ships. On arriving in Scutari they were then nursed in conditions of tolerable comfort.

On 8 September the allies launched their second assault on the Redan and Malakov. The British columns attacking the Redan were again repulsed with heavy loss of life but, after a brief engagement, the Malakov fell to the French. Since the Malakov was the key to the defence of Sebastopol the Russians then destroyed all the buildings left standing after the allied bombardment and withdrew to the northern side of the harbour.

On 25 February 1956 a peace conference between the allies and Russia was convened and five weeks later the Treaty of Paris was signed. Following its ratification on 29 April the evacuation of the Crimea began and by 12 July the last allied soldier had left Sebastopol.

The war had ended inconclusively. The tactics employed by the allies had been unimaginative and the victories at the river Alma and at Inkerman had owed little to the leadership displayed by any of the commanders. Nonetheless, the losses in battle had been light when set against those resulting from fever and cholera. In this regard the campaign in the East had differed little from any other fought in Europe or the Colonies during the previous century. However, in the years which had elapsed since Waterloo there had been much social change and events which fifty years earlier might have been attributed to the workings of a malign fate were no longer acceptable to the majority. Moreover, the rise of popular press and the invention of the electric telegraph had ensured that the news of such events would become public knowledge in hours rather than weeks. The expeditionary force had been dispatched to the East amid scenes of great enthusiasm. The news that British soldiers were dying of disease in large numbers under conditions of considerable squalor provoked much indignation. Given the low esteem in which the

medical profession was held it was then perhaps inevitable that Dr. Smith and his colleagues would be singled out for blame.

The present study has attempted to show that the Director General of the Army Medical Department showed much foresight both before and during the campaign. It has also attempted to show that the medical officers attached to the expeditionary force displayed an acceptable standard of professional competence and were industrious and compassionate towards the sick and wounded. It seems clear that they were handicapped in their duties by a system ill-suited to the needs of an army in the field. It also seems clear that they were overtaken by a series of naturally occurring events which they were powerless to influence. Contrary to popular belief there is little evidence to suggest that they deserved the opprobrium which was heaped upon them.

Appendix 1

Transcript of letters written by Inspector General Cumming, Principal Medical Officer, Scutari, to Inspector General Hall, Principal Medical Officer to the Expeditionary Force.

Letter undated but contents refer to events in January 1855.

Before I received your official letter respecting my assuming charge here I had a communication from Ld.Wm.Paulet on the same subject. I showed him the Duke of Newcastle's instructions and also Dr.Smith's letter and he agreed with me that at present I would not be justified in discontinuing my duties as Commissioner. I assured him at the same time that I would give all the aid I could to Dr.Menzies.

Things here are going on very well indeed and daily improving and the chief difficulties we encounter now is the want of transport to take the invalids to England. The Admiral makes promises but, like many others, comes very far short of them and I have represented to the Commandant the necessity of taking steps on this point.

Nearly one third of the Barrack is now undergoing repair and I hope will be completed in the course of the next week. Several of the wards are already fit to be occupied. This, including corridors, will probably give room for 600 beds. There is now no man here without a comfortable bed with an ample supply of bedding, an abundant and wholesome diet and a liberal allowance of extras. At the General Hospital all have some kind of bedstead. Here the supply of boards and trestles is not yet sufficient to afford everyone a bedstead, except in the corridors, but they are being made and are coming in daily and with those expected from England the whole establishment will be complete within a week. Additional kitchens are being put up for the preparation of extra articles of diet and, with ablutions and bathrooms, will soon come into operation.

Purveyor's stores are more plentiful but the Purveyors are not quite what they ought to be, and as to the duties of the Chief, I am, in great measure, in the dark; the instructions for the guidance of the Department, as far as they relate to him, appear rather vague and unsatisfactory. Mr.Ward is not only totally useless but a serious incumbrance and until someone fills his place it is impossible to carry on. He ought to be got rid of without delay.

I fear the Apothecary's stores are in great confusion, and, although I saw Mr. McIntosh for a few minutes two days ago, there does not seem to be much possibility of their being put to rights.

I shall be exceedingly glad when my present duties are over. I am forcibly reminded daily of the loss of my poor friend. (Dr. Spence) There is no one with whom I can talk matters over and I am not quite satisfied as to the results of our labours. I am sorry we did not get Lawson, but my legal friend (Maxwell Benson) was impatient and would not consent to longer delay. We have addressed queries to all of the Medical Officers in the regiments, which, it is hoped, will expedite matters. We go to Gallipoli and Abydos as soon as the Admiral finds us conveyance. Very soon after this we shall go to the Crimea and I trust I shall have the pleasure of finding you there. I wish you would turn over in your mind any suggestions which you think will contribute to the better working of the Department and, if you have leisure, which is hardly to be expected, will write them down as briefly as may be so as to save time and trouble.

I visited the French hospital at Pera last week. It is an entirely new building and infinitely better constructed than the General Hospital here. The engineer is going down today to look at the state of Kulleli Barracks and, if required, I hope the Purveyors will have a sufficiency of furniture as may be required.

I sincerely trust that the cholera has disappeared and that the state of affairs has improved since you last wrote.

2 April 1855.

I send you a copy of a letter I received about the civil practitioners. They are difficult to deal with as regards themselves and us. I go on the principle of giving them every facility and, if possible, avoiding placing us in the wrong.

They tell me they came out expecting to find this place in a horrid state of disorder, a pest house. They find it rather the equal of the London hospitals. One of them is Physician to the London Hospital and the brother of Dr. Fraser, late of the 60th., whom you may possibly have met.

2 April 1855 (continued)

I understand they came out expecting to have the same as 1st. Class surgeons, and thinking it better that we should make the profession as remunerative as possible, I have put in orders accordingly. The people at home ought to be considered lunatic but it will do them good to bleed freely as regards money.

2nd. Class Surgeon Sunter was found drunk by Lord Wm. Paulet on the 30th. and placed under arrest. I gave him the option of resigning or a court martial. He took the former but has since expressed a wish for the latter. You will no doubt be referred to about him. I don't suppose he will be much of a loss. From what you told me I presume Lord R. will not accept his resignation but will order a court martial.

I have applied for more transport but am apprehensive that it is hardly procurable.

6 April 1855.

I do not feel at all disposed to grant Mr. Eame's wishes. He is a very inefficient medical officer and by no means deserving of my indulgence. He has been trying to get away, to my knowledge, for the last five months. He is in good health but now appears on the sick report. It is simply a small abscess in the perineum. I shall never get on if young fellows are allowed to go home when their mothers wish them to. Let them resign and then they will effect their purpose and benefit the service.

I do not think the monthly returns for January and December can be made out with any approach to accuracy and I have told the Director General so. Even for February there is a certain amount of error which cannot be corrected without cooking, which I do not choose to practice.

Our casualties are sinking low. Only one in this hospital in the last four days and for all the hospitals only five. I imagine that three or four thousand can never produce less.

Assistant Surgeon Luscombe is dying of disease of the brain and spine. I intended to send him home by one of the last transports but he has been too ill to go.

I sent you some vaccine lymph which I hope you received. I think I gave it in the charge of Assistant Apothecary Acton. It cost a good deal of money so you had better take care of it.

I have a good deal of annoyance with these civil practitioners and I am puzzled to know how to dispose of them. There has already been a disagreeable misunderstanding betwixt one of them and Delmege. Whether right or wrong Delmege lost his temper and made use of language which he ought not to have used.

We received yesterday afternoon, two bad cases of gunshot wounds. One compound, comminuted fracture of the left femur which, it is thought, ought to have undergone amputation in the field or, to give preservation of the limb a fair chance, ought not to have been sent on board ship. The other, a severe shell wound of the right nates, fracturing the ischium. As a large piece of shell was removed a little time ago, a tendency to gangrene which showed itself will, I hope, be stayed. Both belong to the 49th.

I wish to get rid of more invalids but cannot get tonnage. Several hundred are selected and could be got ready in a few days.

About forty more nurses are expected here in a few days but where they are to be put I know not. I trust peace will relieve us of all such creatures.

10 April 1855.

As soon as I received your letter yesterday I gave Mr. Millar directions about the bedsteads, requesting him to send amongst them, 100 portable. On the whole you will find the boards and trestles the best for casualty purposes, with one disadvantage, that they are made about a foot too low.

The requisitions for medicines has also been put in hand. I made an alarming discovery or fancy I did yesterday. Our chief medical storekeeper has I fear, the same propensities as Mr. McIntosh.
Quelle horreur.

I agree with you about the Sanitary Commission. They went mooning about here telling us what everyone with eyes and nose could not fail to detect and have left the place in much the same state that they found it.

17 April 1855.

On receiving your letter yesterday I desired Mr. Milton to start as soon as possible the Purveyor's duties. 70 pounds of quinine have been recently forwarded to Balaclava. I ordered 100 pounds more by the first opportunity.

There is a host of civilians here now and I confess having tried to induce some of them to go to the Crimea. Only one of them has given me much trouble. An imposter of the name of Bryce, residing in Constantinople, has got himself an appointment amongst them, under the pretence of knowing more than anyone else of the diseases of this country.

I hope to get away more invalids soon if the Admiral honours his promises.

19 April 1855.

I send you a draft of six and an assistant surgeon for one of the regiments of Guards, which I hope will meet your needs for some time. The Brandon has gone on to Abydos after having a few bad cases taken out of her. The Ottawa is now being cleared of cargo and I have some expectation of getting rid of a good many men for England, but where the navy is concerned I have always a doubt of arrangements coming off.

More civil practitioners. I don't know what to do with them and they are disposed to stand on their importance. They are by no means equal to our own and receive in one year what ours do in six, with a gratuity at termination of a similar amount. Oh ! that peace would come and rid us of all these parasites.

I was sorry to hear of the recommencement of the siege operations, more especially as from all accounts we are not likely to get possession of Sebastopol for a long time to come.

20 April 1855.

More civilians. A Dr. Pincoff, or some such name, made his appearance here a few days ago. He is a Saxon from Dresden, and brought an introduction from Guthrie, who says he is a very able man, a physician and not a surgeon. It is impossible that I can

control or find employment for all here. Dr Lyons, a pathologist, is announced, and, it is said with a salary of £100 per examination. Hide your diminished head. How will this go down with the men? There is no place here for such, and soon the deaths will be from phthisis, chronic dysentery and such like diseases, which might equally well have been investigated at home. What in the name of God does all this portend? It is altogether too much for me. My health won't stand it. I think it is just as well that these men's remuneration should be pitched as high as possible for if it does not better our position it will tend to render the whole affair ridiculous. Surely a day must come for some inquiry into all this extravagance.

I have got off two vessels with invalids. The Lucy Eglinton with 76, the Simla takes 60 and some Russian prisoners. The Golden Fleece goes to Kulleli tomorrow for 180 and makes up her cargo here to about 300. Also the City of Norwich for 110 and the Black Prince 140. I sent the Melbourne to Abydos as Jameson was getting rather low. The establishment at Smyrna can have but little to do.

We are getting rather low in medicine chests and a requisition has been sent to England. It would surprise you to see the quantity of medical stores here now.

The French have got a large establishment on the other side and I am sorry to hear that cholera in a very virulent form has made its appearance amongst them. We will no doubt have a visit ere long, and with so many men debilitated by fever the disease, will I fear, be very fatal.

The new Purveyor-in-Chief is expected today. He ought to have come by the last packet but at Athens went to take a look at the Acropolis and was left behind.

I have been required by the Director General to inform him whether the number of medical officers now here is sufficient for the performance of the medical duties at Scutari during the summer months when active operations in the Crimea must be anticipated. Probably you can assist me in this, for with the Smyrna establishment and the others coming into existence, I feel unable to form at all a satisfactory opinion on the subject, as it will depend a good deal also on your resources.

The pathologist has just reported himself. The industrious MacGregor is, I believe, the person who brought him here and I hope he will now find him a suitable place for pursuing his researches.

Assistant Surgeon Simons is just reported as having died rather suddenly at the Palace Hospital after having a tolerable good breakfast. He was convalescing from fever.

26 April 1855.

You must have received a large supply of quinine about the time you wrote for more and there has been at the wharf for several days 100lbs which I ordered to be sent up by the first opportunity, so when all arrives, you will have enough for every man in the camp to have Intermittant Fever.

The Smyrna establishment has not yet reported itself ready to receive more sick, when it does so they shall have an immediate cargo. The Brandon, with some men fit for duty, is expected daily.

Dr. Parkes of University College made his appearance here two days ago. He is to establish a wooden hospital for 1,000 men on some suitable site in the neighbourhood of Constantinople and the whole of the staff for it are to come from England. The hospital itself has not yet arrived but is expected daily.

He told me that MacGregor had written to the Secretary for War recommending that some person capable of making post-mortem examinations be sent to Scutari. I would not have believed but on such authority that he could have had the effrontery to do so.

I am sending off invalids as fast as I can but the admiral is more dilatory and uncertain in his arrangements than the much abused Boxer. The weather at present is unseasonable for embarkation. I am puzzled what to do with the civilians. It is a difficult matter even to find them quarters, and another of them, Mr. Birt, is much disposed to give trouble and probably to make a case.

Two of Miss N's family got drunk last week. They have been sent off. A Miss Terrot, daughter of the Bishop of Edinburgh, was sent home, not a little mad, some few days ago. I was mistaken about the habits of our chief medical store keeper - McIntosh is said to have had an attack of fever and that long looked for return of medicines cannot yet be obtained - What is to be done with him? I am inclined to send him home and let them deal with him there.

I had a note from Dumbreck yesterday about your friend Eames, who is now at his duty. He says they are in a state of profound uncertainty about the future organization of the department.

4 May 1855.

Fitzgerald, my assistant, is anxious to go to the Crimea for a week and I have desired him to call on you and give you all the information connected with Scutari in his power and to receive such instructions from you as you may wish to have carried out. He can better tell, than can be done in writing, how matters are going on.

I have desired him to write down whatever you may wish me to know. You can place implicit confidence in him. There is much to do here and I am anxious that he should not be absent for more than a week.

One of the civilians has tendered his resignation and will be in orders tonight.

The Bulbul (Miss Nightingale) goes to the Crimea tonight on the Robert Lowe. I heard a report this morning that she is to have a title. Lord Palmerston wishes her to be made, with Lady Palmerston's consent, a Knight's Companion.

How do you act with regard to Medical Boards ? Do you require the members to take the declaration ? I am inclined to think that it will be necessary. They are, I suspect, treated rather too lightly.

10 May 1855.

I did not get your note about the leeches until 4 o'clock yesterday afternoon, when I sent for Joseph and desired him to procure them without delay and have them forwarded by the first opportunity, which I hope will be in a few days as a draft is expected to embark for Balaclava this afternoon. I do not understand why your note was so long in reaching me. I little thought of you requiring leeches, what next ?

The Australia takes 180 invalids and will probably leave on Sunday. The Germania is told off for a cargo next week. I hear Cruikshank is in the Gazette. How do you mean to dispose of two deputies ?

I should much like to know whether you intend sending any wounded so that I may be prepared to the fullest extent. I hope the Sardinian contingent will not encroach on us.

13 May 1855.

I hope that the arrival of the leeches has so far enabled you to stop public clamour.

I have had a letter today from the D.General urging preparation in case of need and wanting to know the amount of accommodation here. He mentions that you have a considerable amount. There are due here today about 1,900 more beds and upwards of 300 invalids leave for England in the course of the next three or four days. Do you think the accommodation this leaves sufficient ? Abydos will soon be able to take 150, but it is not a comfortable place.

I shall take care that no delay takes place in forwarding the stores by the Arethusa and I hope they will be readily found when it arrives.

21 May 1855.

Mr. Joseph is going to make another try at the leeches and some go up tomorrow, I believe, in the Severn. Panniers have been sent some time ago and I am getting some here repaired and I intend arranging to have a few more made in Constantinople until a further supply arrives. Mr. Fernandes makes enormous demands, but, as far as I can learn, the stores have been able to meet them, although it will be as well to give us as much time as you can to complete them.

What is to be done with McIntosh I know not. I have told Dr. Smith that, but for the Parliamentary Committee now sitting, I would send him home. What do you advise? It is too bad to have a worthless fellow doing nothing - and not capable of doing anything.

Cholera has made its appearance here as well as with you and the steward of the Palace Hospital died yesterday and another poor fellow is likely to follow.

I have made application for more tonnage for England as I have got returns of about 400 invalids, including 140 at Abydos, whom I am desirous should go as soon as possible.

Your estimate of the establishment at Smyrna astonishes me. I broiled for many years more under a tropical sun for 7/6. I see Lord Panmure brought forward the reorganization of the civil departments so we shall probably know what they are to do with us. I, myself, admit that I am unfit for further work and cannot possibly last much longer. Besides, I am exceedingly disgusted with things as they are now.

How do you mean to dispose of Cruikshank and McGrigor? You must not keep the Nightingale. I am inclined to think that the whole party are getting tired of it and would be delighted at nothing more than being able to make their escape. Her friends are most anxious she should return home.

The Severn leaves this afternoon and takes the leeches and some purveyors stores but nothing else. The Brandon will probably go in two or three days.

19 May 1855.

If you will send me the form of the states you wish for I will get them printed here with as little delay as possible. I have desired the apothecary and purveyor to forward returns of their stores, and I will endeavour myself to be a little more punctual in sending what you require.

Four 2nd. Class and several Assistants go up by the first opportunity and more will follow. The pathologist, with his body snatchers, is to pay you a visit soon. Here, there is as yet no suitable place for him, as he cannot put up with that which we have been obliged to

content ourselves with, and until a theatre can be built, which is to cost a thousand pounds, he may as well comply with his instructions and visit the Crimea. His mission is expected to last about 4 months, a gross piece of humbug, hatched up by Miss Nightingale and McGregor.

What do you intend doing with the Deputies ? I hope you will give McG. a turn in the field.

We are down to zero and 117 invalids embark today in the Black Prince. When the steamers arrive for the conveyance of others there will be but few to take away.

I quite agree with you that it is no easy matter to keep our officers at their work, and if they get a slight attack of fever they immediately endeavour to turn it to account and get home. I am now obliged to resist applications for medical boards. Munro and Simpson had they been sent down here for a month would in that time have been perfectly well again, indeed, the former left without anything apparently the matter; but he is going home to get married. Simpson, likewise, after a fortnight at Therapia, would have been all right

Your friend Eames is still here and a little importunate, but I am obstinate. In some cases I have recommended a fortnight or a month's leave up the Bosphorus which has restored several.

Don't send me Denny if you can find any more suitable place for him. He is a very bad one and would tend to corrupt our youth, and not be a good example to set before the civilians.

The huts in the course of construction on the common belonging to the General Hospital will, I expect, be finished early next month when the Commandant intends to move the depot. We shall then have a great deal more room here, and possibly other advantages. We have had no more cases of cholera yet. Weather becoming exceedingly hot.

29 May 1855.

I have only time to say that I have today written to you about McIntosh. It is, in my opinion, quite useless to keep him here. If you give me permission to deal with him I will at once send him home. To prefer charges against him would give an infinity of useless trouble for it is impossible to substantiate drunkenness against a man who is a muddler; one who is never drunk and never sober.

When you can give me the information, let me know when I may expect sick.

I forward by this mail an application for leave from Dr. Humfrey together with a note I received from him respecting it. I hardly think the reason he assigns sufficiently urgent and should he obtain his wish it will, by making Lawson senior deputy, be very awkward should anything happen to me. Lord Wm. Paulet don't at all like L and for Lawson's sake it will be much better that for some time he should not occupy a prominent position here, it would only produce the former unjust clamour.

We had two cases of cholera yesterday, one terminated fatally, but I have not yet heard the fate of the other. The French continue to have a good many cases and we can hardly expect to escape with the few we have had.

The pathologist has just been with me, wishing to get a passage to the Crimea. He has done nothing here for want, he says, of sufficient accommodation, but, as the estimate for a theatre is £1,000, it's not likely to be completed for some time, and I apprehend that you have no building of that calibre for his pursuits.

Your official (letter) respecting Capt. Darby has come to hand. Such an infamous attempt I have never heard of. Dr Lamont, who has been in immediate attendance upon him, is now in the Crimea and can furnish you with further particulars. Unfortunately the abstract of the case which accompanied the application for a board has been mislaid but it only tables what I said in my letter to Lord Wm. Paulet of 19 April. It was written in consequence of one from Lord Panmure who wrote to Lord Wm. in consequence of a complaint from from Darby's father that his son had been unnecessarily detained here. It would have been most imprudent to have moved him until the state of his feet had sufficiently improved. The father wrote to me sometime ago.

I am worried to death with these civilians for whom there is but little to do.

Two more cases of cholera one fatal, the other improving. The Nimrod leaves with invalids tomorrow.

5 June 1855.

I regret to inform you that another case of cholera occurred in the General Hospital yesterday which I presume terminated fatally as it appeared hopeless when I saw him in the morning.

Nothing has been stated as to how the Department is to be reconstituted, Lord Panmure having entered into no details and all is vague conjecture.

There seems some hope of peace and I trust that our operations in the Sea of Azov will show Russia and her friends that she is likely to get the worst of it.

Your account of the requisitions made by some of our officers is most amusing but not at all creditable. There are some most disreputable characters amongst us and I have recently had examples of their meanness which have astonished me. The story is too long to narrate but Gordon can give you the details. I, at one time, intended to give it to you officially but I thought it was better to drop it.

About 140 invalids go from Abydos this week and more will follow. You must throw cold water on our affording any accommodation for the Sardinians.

I don't feel at all well.

12 June 1855.

I send you as many medical officers as I think I can well spare. If I knew the probability of the arrival of sick and wounded I might possibly go further but without that I am afraid to do so. These civilians hamper me considerably. You have now got all the effective 2nd.Class (surgeons) but three. I should not like to part with the whole. If you want 1st.Class let me know but they are so necessary to control the civil element that in the event of a great accession of sick and wounded I fear should get on badly without them. If you take a D.I.G.H (Deputy Inspector General of Hospitals) try McGrigor.

I have got a long list of invalids and convalescents ready, but I shall now be obliged to send a 2nd.Class with them and as Laing is convalescing I intend sending him. Somers will also, as far as I hear, be obliged to go home. He is, however at best, good for very little.

You will receive by this mail a supply of weekly rates and I hope they will please. I think your medical boards are a little too kind in their findings, several of the men recommended to go home whom I have seen only require a month's leave on the Bosphorus.

If you rob me of any of the 1st.Class I shall be swamped. Dr.Fernandes requisitions astonished Mr.Joseph and really they are enormous.

How sincerely I wish that this war was over.

16 June 1855.

Nothing can be made of McIntosh and I shall apply for a Board as to his health and fitness for the service. He is again sick. I am sorry to hear you have had so many casualties in the last affair. I fear it is only an installment of what is to come.

Oh that all these horrors were terminated - I sincerely believe that the taking of Sebastopol, of which all seem to talk confidently, will at least make the remainder of the game easy.

Several medical officers go home today and I wrote to Dr. Smith by the last mail requesting that he replace them as soon as possible.

Worried to death with the civilians. I have got one most troublesome fellow, a Mr. Rowden. I wish them all to the Devil.

A Lieut. Wemyss, 93 rd. Reg. died of cholera on board the Imperator and a Major Sorell on his way from India, who had paid a visit to Balaclava and returned here two days ago; died of the same disease, after a few hours illness, at Pera yesterday morning.

19 June 1855.

There are in all but seven 2nd. Class S.S. here at present - one convalescent from fever I sent home in charge of the Dalhousie last week with about 200 invalids, and two useless, MacLise and Jenners, are sick - which leaves me only four, and one of them in charge of the depot.

You may conceive that I am not a little hampered by the civilians, and I don't know how I should get on if I were left with them alone. I am always under the apprehension of you sending me an influx of wounded, and unless the staff is kept above our immediate wants we should fall into a good deal of confusion.

I have had an application from Tice to take a voyage to Malta on account of his health, but Lord WM. Paulet being out of the way I have been able to stave it off. Langley has been down here for some weeks and has made desperate efforts to get home and may probably succeed although I certainly do not think that he requires it. O'Flaherty is occasionally ill and I regard him as a creature of a similar kind. I wrote to Dr. Smith recently requesting him to send me more medical officers, 2nd. Class and Assistants. I had a note from him about an acting assistant surgeon, but he says nothing about our reorganization. He only mentions that the report of the Commission may soon be expected. I observed, by the by, that Lt. Hardinge has been most unjust towards you. You may count on it, however, that you will live all this down.

2nd. Class S.S. Crerar, in charge of the sick on the Tasmania, has got hold of a report about the Department which will no doubt reach you before this.

Two assistant surgeons and three dressers go today by the Snowden.

25 June 1855.

I have returned the note with the information filled in as far as I am able. I am sorry to hear that you have had so serious an affair and that there is so much probability of many more. You will do well not to send your severely wounded here. I feel certain they will not do well. There have been several cases of fever and hospital gangrene amongst the Russian prisoners in Constantinople. Six civil practitioners have arrived and more are expected daily. I am puzzled how to distribute them. Two join you, the others appear to have bargained not to be sent to the Crimea.

Humfrey and Beatson have returned and both are gone to Kulleli. I went over there on Sunday and found matters in a pretty satisfactory state. Tice was anxious that I should recommend him for promotion, which I declined, not being exactly in my province. He asked also if I would issue a Departmental order respecting my visit, which I also declined to do for the present.

A letter from Humfrey, just received, notifies his taking charge at Kulleli and complains much of the insalubrity and insufficiency of the officers quarters.

140 invalids went on board the Chapman yesterday and 170 go on board the Julia tomorrow and 220 on the Tynemouth, two or three days hence.

Letter continued 29 June.

The Julia has been put all right and the invalids went on board. She will sail as soon as she has sufficient men to take her away. For several days it has been dead calm. The Tynemouth has been instructed and will probably go to Kulleli tomorrow.

Recommend them not to send cases of compound fracture. A man belonging to the 97th.Reg. arrived with a compound fracture of the tibia and gangrene of the foot has commenced. Gordon has operated but I fear with not much chance of success. Such cases ought never to be sent so far.

6 July 1855.

I thought I should have succeeded in keeping Langley but notwithstanding my efforts he has gone home. O'Flaherty has been little or no use for a long while and he goes home also. I expected as much as soon as I saw his wife make her appearance some time ago. Tice is now at Therapia. I don't think that he is likely to move for a while encumbered as he is with a good deal of furniture and Mrs.Tice. All these men are in infinitely better health than I am. Dr.Woolaston is, I think, about my age and ought never to have been sent out. Your friend, Grant, has had several attacks of haemoptysis and I shall bundle him off soon, as he is unfit for work. At present he holds on, not wanting to part with his bread and butter. A friend of his, Dr.Glover, is, it is said, a man of intemperate habits and I only

wait an opportunity of getting rid of him. Altogether they are a sorry lot. What have you done with the pathologist ? I presume he is doing nothing. His two assistants are employed at £2 2s. per diem.

Second Class Surgeon Hooper arrived a few days ago from Mauritius. I have detained him for the present and put him on a Board on the Apothecaries stores, the proceedings of which I wish to send to the Director General as soon as possible. He is a very good man and as the senior of his rank will soon be promoted.

Cholera has left us for the present and I hope we shall see no more of it. We lost nine men by it last week.

How came you to let so hearty a fellow as Dr. Prendergast go home ? They say he declares he will not return to this country unless he gets the next step. How lucky all these men have been compared with you and me.

I visited the Sardinian Hospital last Sunday. They complained much but did not seem badly off. They have accommodation for about 1,000 men but said they were without bedding and hospital furniture all of which I offered them with the view of preventing them taking up room here. A general officer, one of the medical officers and two others connected with the intendance, paid us a visit on Monday. We offered them part of Haidar Pasha, capable of containing about 200 patients but I am inclined to think they will not take it. They seemed disposed to erect sheds for themselves on the Asiatic side of the Bosphorus nearly opposite where they are now.

You will see by the proceedings of the Medical Board that your friend McIntosh is in a state approaching fatuity. Linton has been down to Malta and has come here on his way back. He says he is better and looks pretty well. News of the re-organization, when and how, seems still to be conjecture, but all here are of the opinion that something much to their advantage is soon to be promulgated. I do hope they will allow those with upwards of forty years service to retire at all events. I must soon leave. I am sadly annoyed with Angina Pectoris in a mild form and cannot take exercise except on horseback, so that whether I can afford it or not, I must seek retirement and quiet. Next month I complete my 60th. year.

The Duke of Newcastle is expected here in a few days. Cruickshank is here in a rather anomalous position. I think he ought to be in charge of this hospital but I did not like to make any change as I thought it possible you might wish to make the distribution or might have work for him elsewhere.

10 July 1855.

There has been quite a flood of sick officers of one kind or another within the last few days, and a good many of them are on board ship for want of house room ashore. I observe among them Dr. Burton and Mr. Ivey. O'Flaherty is off in the most comfortable way passing a short time in Paris to see the Exhibition. 200 invalids leave tomorrow. The Civils are a great tribulation as they are apprehensive they have compromised their terms of agreement by accepting quarters and rations, which, if they do, they are only to receive six months gratuity.

Grant has had more attacks of haemoptysis and yesterday it was reported that he showed some symptoms of mental aberration. I shall pack him off as soon as I have an opportunity.

Your requisitions for medicines will be complied with immediately.

31 July 1855.

I have not been able to get Mr. Baskerville away in consequence of the state of his health. I thought it better in communicating with him to have everything in black and white and I send you copies of the correspondence. I was afraid he was going to make a martyr of himself and that I would not allow. He will probably not leave this place until the beginning of next week.

I sent off today above 200 invalids and a good many officers. Burton, you will be surprised to hear, goes back in a day or two, looking exceedingly well and resolved to give the Crimea another trial.

Lord Wm. Paulet goes to the front and is to be succeeded by Col. Stokes from Smyrna. I am indifferent who comes and who goes but, on the whole, prefer old to new acquaintances. I should not think that Lord Wm. would make much of a general but as I told him yesterday there is nothing so easy as fighting.

More trouble amongst the Civils. One of them told me yesterday that he would write to the Prince. If you wish for an agreeable fellow allow me to send you a Mr. Rowden. I think I shall be obliged to place Cruickshank in charge of the Hospital and give McGregor some other duty. Mr. and Mrs. Bracebridge are gone to England and Miss N. is left alone. I believe they intend returning before the end of the year. What fools !

Have you heard what they mean to do with Smyrna ? Should the Sardinians require accommodation I suppose it be as well to offer it to them and keep them away from Scutari. Yesterday it was told to me that Alexander is to be Director General but I hardly think that such is likely to be the case, at least, not for a year or two. When will we be able to meet in peace and quiet and talk over these matters when they no longer affect us ?

10 August 1855.

Mr.B. (Baskerville) went off yesterday. They gave him a passage to Marseilles, paying for his keep. He thinks himself a martyr and, Lawson tells me, seems disappointed that he has not made more noise. I understand that the Court of Inquiry went against McGregor, his statements, whether true or not, being contradicted as a matter of course by the orderlies and patients on the ward. The proceedings have gone to Lord Panmure and I wrote to Dr.Smith an account of the affair giving my opinion that the system would not work unless the civils were placed under strict control. I really cannot bear up much longer under this worry.

There is a report that you are going home. Who is to succeed ? I am altogether unequal to it both mentally and physically and will not make an attempt. I am quite done up.

200 invalids go to England on Monday and I am not a little puzzled who to send with them. Our dispensers are running low and I have been obliged to take a new one on trial. He is well recommended both by Joseph and one of the civilians.

18 August 1855.

You have so flooded me with sick that I can see but little probability of my being able to send you professional aid for a week or two. An acting Assistant Surgeon has bolted and several are sick and if I give them more work I am apprehensive of others following his example. The civils, as you might suppose, are not a little in the way.

I expect to get the Arabia in here in a few days to take invalids to England. She, fortunately, has a surgeon but there are three sailing vessels being filled up and I hardly know how to man them with doctors. I must try and compromise the matter with those who are determined to go home. Mr.Hilles is such a nuisance that Lawson begs me to send him away. I am sure you would not like to see him again in the Crimea and the only way I see of dealing with him is to send him to England. You should have given Rutherford a regiment. He is a good officer when he likes it.

Our numbers are increasing rapidly and I fear that in a few days they will be at 3,000. We admitted into the different hospitals upwards of 400 and the Brandon is expected today.

The report of Guthrie succeeding has also reached this end. I shall not be surprised if things turn out so. If they studied the advantage of the service they should make you his colleague, although I doubt, after all you have put up with, whether you would accept such an appointment.

I entered my 61st. year the day before yesterday and am only desirous of quiet and shall certainly quit at an early date. I am far from well and rest is the only means of adding a few years to my existence. The three score and ten will soon be completed.

24 August 1855.

I have been able to collect a good many medical officers and I presume that some of them will leave today. I have, however, denuded these hospitals to a considerable extent and have been obliged to beg assistance from home.

I have just been obliged to land Assistant Surgeon Atkinson from the Poictiers, who reports himself sick, and place on board her Assistant Surgeon Taylor, a very good man. If we have a large influx of sick we shall be somewhat embarrassed for assistance.

Your friend Maclise went off the day before yesterday in charge of the Columbo, much to Lawson's relief. He is undoubtedly not sane and it is equally certain that he is worthless. The Arabia goes today with 223 on board but fortunately she has a surgeon.

I would recommend you to keep out of the reach of the Russian guns. Had you been killed or maimed I fear your case would not have been very liberally considered.

I have quite made up my mind to retire and shall acquaint the Director General of this by the next mail and probably serve you with a notice to the same effect. I am not equal to the work and it is no use shortening the few years I have to live by the worry and anxiety of such duties as are imposed upon us. Let younger men have a turn at the wheel.

The proceedings of the Court of Inquiry will, I think, show the nature of the 1,000 reports fabricated to our disadvantage. I sincerely trust H.M.G. will then do you justice.

I have a long letter from a Mr. Haywood touching Mr. Stowe. Mr. H. might have shortened his stay considerably but he seemed to me to write as if he regretted being obliged to tell the truth. I have a mortal aversion to parsons as a class and more especially to those we have in this part of the world. I admit, however, that they are the only men whose situation I envy. They have neither cases nor anxieties. I trust I shall soon be equally at my ease.

Have the recent successes placed you any nearer Sebastopol? I fear not.

32 invalids go from Abydos in the Edwin Fox. Jameson will be left with only two or three patients. I do not know what can be done with the hospital there.

Dr. Smith is calling on me for four quarterly reports to 31 December - 31 March period, when there was no time but to attend to hourly wants.

25 August 1855.

I shall send you some relief in a few days but there are so many here sick that with the hospitals so full there is a little difficulty in supplying your wants. The affair of the 16th. August (Battle of Tchernaya) is quite cheering and I hope will have an effect on our enemies and bring them to their senses. I observe, however, that nothing short of Sebastopol will satisfy us.

150 go on board the Columbo along with McClise today.

Appendix 2. The incidence of malaria in Bulgaria during the 19th. Century.

Extract from Davidson A. (1892) Geographical Pathology.
New Sydenham Society, London.

Chapter XX. Roumania, Servia, Bulgaria, Roumelia.

As our acquaintance with the pathology of these countries is so limited, it would serve no good purpose to enter into any minute geographical details. Suffice it to say that this region is hilly, being intersected by the Balkans, the Dinaric Alps, the Pindus Mountains, the Despoto Dagħ range, and their numerous offshoots. The country on the left bank of the Danube from Galatz downwards is excessively marshy, as is also the Dobrudja, which stretches between the shores of the Black Sea and the Danube in that part of its course, where, turning north, it runs parallel to the Black Sea. The valleys of the Drin and Morava, and the banks of the Save in Servia; of the Maritza, the Kara-Su, the Struma, the Vardar and other rivers in Roumelia, present many marshy localities.

Pathology.

Malaria is intense throughout these districts. At Galatz and its neighbourhood, malarious diseases prevail to a large extent, as is shown by the frequent occurrence of the disease among the men belonging to the British ships of war stationed at this place. (Navy Health Reports, 1881.) The banks of the lower Danube are throughout very severely affected. Here fevers prevail in the spring after the subsidence of the waters, and again in autumn after the first rains. The inhabitants of the swampy districts suffer from malarial cachexia and enlarged spleen. That part of Roumania which is known as the Dobrudja, extending from the shores of the Black Sea, is intensely malarious. The fevers here commence in June, and last until the end of autumn. Remittent and quotidian forms are the earliest to show themselves, while tertians prevail in August and September, and quartans, towards the end of autumn. Here also the malarial cachexia sets its mark upon the inhabitants.

In Roumelia, fever is most generally met along the shores of the Aegean Sea, the Sea of Marmora, and the Black Sea. The sailors visiting Gallipoli and its environs frequently suffer severely from fever. Adrianople, built on the slope of a hill, suffers from malaria. Half the admissions among the French troops stationed here in 1854 were from malarial fevers. They were generally of the quotidian type. Malarial fever, frequently with great enlargement of the spleen, is also prevalent in those parts of Constantinople close to the shores of the Bosphorus. (See also page 31 of text.)

Appendix 3. Cholera in the 19th. Century.

Extract from Pollitzer R (1959) Cholera.
World Health Organization, Geneva.
Chapter 1. pp. 30-31.

Third Pandemic (1852)

There can be no doubt that during its course as well as at its commencement the third cholera pandemic was the combined result of local recrudescences due to a temporary entrenchment of the infection and of repeated importations of the disease so that, as noted by Macnamara, it was not possible to trace its course step by step as could be done in the previous outbreaks.

The main features of the third cholera pandemic from 1853 onwards may be described as follows.

Besides raging in Persia and Mesopotamia, as a consequence of an 1852 outburst in India, cholera was rampant in 1853 in the northern part of Europe and also reached the USA, Mexico, and the West Indies.

In 1854 the infection continued to exact a serious toll in some countries of northern Europe, for example England, but was particularly rampant on the continent to the south. The transport of troops from southern France, effected on account of the Crimean war, was no doubt responsible for the appearance of cholera in Greece and Turkey. In the west the disease not only raged in most parts of the USA and Mexico, and in some of the West Indian islands, but also appeared in Canada and in Colombia on the northern shore of South America. The only consoling feature amidst the calamities caused by the infection in 1854, one of the worst cholera years on record, was that observations made in England clearly showed, to those who were not obsessed by fanciful theories, that contaminated water played a major role in the spread of cholera and that consequently a supply of safe drinking water was of cardinal importance in the prevention of the disease.

Besides reappearing in 1855 in many of the areas affected during the previous year, cholera, which had probably gained impetus through a serious recrudescence in India, appeared in counties hitherto not seriously affected during the pandemic. In the Near East the infection spread via Arabia into Syria and Asia Minor. In Africa the disease appeared in Egypt, spread into the Sudan and along the north coast as far as Morocco, and also visited for the first time, the Cape Verde islands. In Europe the infection penetrated into previously unaffected parts of Italy and the adjacent parts of Austria and made an inroad into Switzerland. North America was apparently free, but cholera broke out in Venezuela and Brazil.

Except in Spain and Portugal (including Madeira) cholera did not cause much havoc in Europe during 1856-57. However, the disease was rampant during these years in India, where spread of the infection was fomented by the disturbances of the mutiny and the subsequent military operations.

Cholera which, commencing an eastward spread early in the pandemic, had reached Indonesia in 1852 and China and Japan two years later, became most serious in these two empires during the period 1857-59. The Philippines were revisited in 1858, while Korea suffered from the disease in the following year.

Other noteworthy events of the period now under review were four outbreaks of cholera in Mauritius from 1854-1862, and serious outbreaks in East Africa where, Zanzibar serving as the main distributing centre, the infection spread along the coast to Mozambique in the south and from there to Madagascar and the Comoro Islands, as well as inland to Uganda. As added by Haeser and Hirsch, cholera, which had already invaded Abyssinia in 1853, reappeared there in 1855 and 1858.

In the Americas cholera manifestations were recorded in 1856 in various parts of Central America, and during that and the following year also in Guiana.

In 1859 cholera showed signs of a much increased activity, ushered in by a serious recrudescence of the infection in Bengal. From India the disease spread, following its old routes, westwards into Persia, Mesopotamia and Arabia, and in a north-westerly direction into Russia. It is uncertain, however, to what extent the outbreaks subsequently taking place in that country, as well as other parts of Europe, were due to this fresh importation or to local reactivation of latent infections.

Apart from a serious recrudescence in Spain in 1860, in the course of which Gibraltar became involved, and slight cholera manifestations in St. Petersburg, where the infection lingered until 1864, Europe seems to have become free from cholera at the end of 1859. (See also pages 29-31 of text.)

Appendix 4. Mortality in the French Army.

Extract from the Medical Times and Gazette.
14 June 1856. pp 604-605.

It has been our lot, on many occasions, to show that the chances of war are far less fatal to the soldier than the diseases he encounters when on foreign service. The sanitary history of the French Army of the East during the late campaign in the Crimea is full of facts which confirm the truth of this proposition in a manner so frightful and astounding that we have long doubted the accuracy of the accounts which have reached us from week to week; and it is only by the accumulated testimony of eye-witnesses, and the reports of Medical Officers high in the French Service, that we have been able to admit the possibility of a rate of mortality among our allies so unprecedented as almost to exceed belief. For the truth of the following statements, however, we have the authority of Medical Officers both in our own and the French Service, and have permission to name them if need be. They are not only interesting in themselves, but additionally so, as the facts have been studiously concealed by the French Government, and are now made known for the first time in this country.

1. There were fourteen French Hospitals in the Bosphorus up to the end of March. Since then three others have been added. The following is a copy of an official return of the patients treated in all the Hospitals in January, February, and March 1856.

January	13,520
February	21,309
March	18,167.

2. During the ten days ending on the 20th. of March, 1009 patients died; and during the following ten days, 948 patients died, in these Hospitals. The number of sick under treatment for all diseases on 20th of March was 11,366, and on the 30th, 9,763.

3. The aggregate loss by death from sickness (nine-tenths being from typhus) in the French Hospitals on the Bosphorus exceeded 10,000 during the first quarter of the present year. The daily mortality in twelve of these Hospitals in January and February ranged up to 240.

4. From the 1st. of January to the 17th. of March, when the transport of typhus cases from the Crimea was discontinued authoritatively, more than 5,000 deaths occurred on board French transports and men-of-war between the Crimea and the Bosphorus.

5. In the Crimea there were 14 Field Hospitals, or Ambulances, during the same period, each containing from 800 to 1,100 sick. The deaths in each varied from 15 to 20 daily. Thus the aggregate loss by death from disease in these Hospitals during this period exceeded 19,000, and is

believed to have been very little under 25,000.

6. It is known that more than 34,000 French soldiers of the Army of the East died from disease during the months of January, February, and March 1856. It is believed, by those able to judge, that those deaths exceeded 40,000.

7. Sixty-four French surgeons have died in the Crimea and the Bosphorus since last November. Of 362 Surgeons of all ranks who have served with the French army since its landing in Gallipoli in the autumn of 1854 to April 1856, 72 have fallen victim to typhus alone.

8. On the 15th. of March 1856, there were, in the Officers' Hospital in Constantinople, 31 Surgeons in different stages of typhus and only one combatant officer.

9. Of 840 Hospital orderlies and attendants employed in the sixty days of January and February 603 were attacked by typhus whilst on service.

Having once become convinced that such statements as the above are really true, we naturally ask, How is it that such a state of things - so far worse than our own horrors at Scutari at the hurried outset of the campaign - should have been permitted by a great nation, when full time had been afforded for the completion of sanitary protection against preventible disease? On whom does the responsibility rest? Why should typhus have arisen in the French camp when our neighbouring camp was free? Why did it spread so awfully after it originated?

We cannot pretend to answer these questions satisfactorily within the limits of a leading article; but a few remarks on the state of the camp, of the Ambulances, of the Transports, of the Hospitals on the Bosphorus, and of the French Medical Service, may possibly throw some light on the gloomy picture, and educe good from evil, by pointing out the way to prevent such loss in future.

The condition of the French soldier in camp sufficiently accounts for the origin of the epidemic. He was crowded into tents or huts, imperfectly warmed and insufficiently ventilated, upon ground sodden by the products of animal and vegetable decomposition. He was attenuated by want of sufficient food. He was affected by scurvy from the quality of the food he did receive. The same causes led to like results with us the year before. We removed them and our army has been ever since in the highest state of health and efficiency. Our allies continued in our former erroneous path and lost a fourth of their army in three months.

The condition of the ambulances, transports, and hospitals account for the rapid spread of the epidemic. The French Surgeons admit that the condition of the places to which the sick were first sent were horrible. The huts and tents were overcrowded. The only latrine was a cask. The beds were the lits de camp for two persons. The beds and bedclothes were unchanged for several months. When a patient died, no matter of what disease, his bed was occupied by a fresh arrival within a short time. There were no trained attendants. The only nurses were soldiers fit for no other use, and, of course, unfit for the office. The duties of night-watching were added to those of day attendance. Patients were, therefore, unavoidably neglected. Typhus affected nine-tenths of all the patients who passed through the ambulances. In the transports the sick were much overcrowded, so destitute of everything necessary to their condition that the French Medical Officers, when defending the practice of removing the sick from the Crimea, could only say that it was better to take them on board than to leave them to die on the beach at Kamiesch.

Everyone who has visited the French Hospitals on the Bosphorus agrees in stating that, with the exception of the Officers' Hospital, they are overcrowded; that the ill-effects of the crowding are not diminished by free ventilation; that the patients themselves, their bedding and clothing, the floors, walls, and windows of the buildings are offensively dirty; that the bed pans and latrines are odious; and that the supply of Medical Officers and their attendants is insufficient.

No one who has witnessed the admirable conduct of the French Army Surgeons can conceal the admiration he feels for the courage, zeal, and self-sacrifice they have shown in the discharge of their duties. But they have been overworked and unsupported. We need give but one instance among many others to prove this. The Hopital de Pera has beds for 2,400 sick, besides officers and attendants. On the 1st. of March last there were only a few unoccupied beds, left so by the deaths of the preceding twenty-four hours. The medical staff consisted of 3 first class and 3 second class surgeons and four assistants. According to Imperial ordonnance there should have been 24 qualified surgeons and half this number of clerks and dressers. The chief, Dr. Cambay, had sole charge of 203 beds, assisted only by one aide-major, and a civil surgeon, an Italian. The smallest number under the care of one surgeon, and he was a junior, was 153. During the morning visit on the 1st. of March, from 7 to 9.30 am., Dr. Cambay actually dictated the diet and treatment of 196 sick, many of them acute cases. But our brethren are not only overworked. Their position is that they cannot enforce obedience to their orders. They are strictly confined to the art of healing; in all other matters they are subordinate to the Intendance. They cannot thin or ventilate a crowded ward, or obtain a change of bed or body linen for a patient, or alter a diet scale without the permission of the Intendant.

In a leading article on the " Civil Element," in our first volume for 1855, we pointed out the evils likely to arise, and some which have already arisen, from the subordination of the French Medical Officers to laymen. The late mortality will surely convince the French Emperor that the system which looks so well in print utterly fails in practice, and that if he wishes to maintain an efficient corps of Medical Officers for the army, he must make them independent of any control in Medical matters, and reward them by a far higher scale of pay and a far more liberal share of honorary distinctions than they at present receive. If he does this, and does not destroy them by overwork, the Army Surgeons of our Allies will maintain their former high reputation. If he will not be taught by the experience of the past, we can only fear that the next time the system is tried in real service, the results will prove as disastrous as in the months of January, February, and March 1856. They could hardly be worse. (See also pages 169-170 of text.)

Appendix 5. Biographical notes on medical practitioners and others referred to in text.

Andrews Robert Fleetwood. Born 21 March 1830.

Assistant Staff Surgeon, Army Medical Department 1853.

Assistant Surgeon, 1st Dragoon Guards 1855.

Service in Crimea 1854-55. Staff Surgeon 2nd.Class 1862.

Staff Surgeon 1st.Class 1863. Surgeon, 5th.Lancers 1863.

Surgeon Major 1863. Retired half pay, 1873.

Died Ramsgate 27 October 1894.

Alexander Thomas. Born 1812. MD.Edin.1837. FRCS Edin. 1858.

Ass.Staff Surgeon 1834. Staff Surgeon 2nd.Class 1845.

Surgeon, Rifle Brigade 1846. Staff Surgeon 1st.Class 1854.

Service in Crimea and Scutari 1854-56. Deputy Inspector of Hospitals 1855. Inspector General and Director of Army Medical Department 1858-60.

CB 1856. QHS 1858. Died, London 1 Feb.1860.

Armstrong James Jekell. Born 1829.

Assistant Surgeon, 2nd.Dragoons 1852. Service in Crimea 1854-1855. Resigned June 1855.

Atkinson Humphrey John Gillett. Born 1831.

Assistant Surgeon, 1st.West Indian Reg. 1853.

Assistant Staff Surgeon 1854-56. Served at Scutari and in the Crimea. Accompanied the expeditionary force to Kinburn. Retired half pay 1860. Died 8 Feb.1875.

Bakewell Richard Henry. Assistant Staff Surgeon 1854. Service at Scutari and in the Crimea 1854-55. Returned to U.K. 1855. Resigned 1856.

Beatson George Stewart. Born 22 May 1812.

MA.Glasgow 1835. MD.1836. Assistant Staff Surgeon 1838.

Staff Surgeon 2nd.Class 1846. Staff Surgeon 1st.Class 1854.

Served Crimea, Scutari and Smyrna. Dep.Inspector Gen. 1858.

Inspector Gen. 1863. Principal Medical Officer, India 1863-68.

QHP.1866. Died Simla, 7 June 1874.

Birt Henry. Civil Surgeon. Served in Scutari 25 March 1855- 16 April 1856.

Bracebridge Charles Holte. Born Atherstone Hall, Coventry, 1799. Educ. Merton College, Oxford. Well known Victorian traveller. Met Florence Nightingale 1846. Introduced her to the antiquities of Rome, 1847 and of Egypt, 1849. Together with his wife, Selina, accompanied F.N. to Scutari 1854 where C.H.B supervised the finances of expedition. Returned to U.K. 1855. Described by F.N. as " The kindest of friends and the best and noblest of men." Died at Atherstone Hall, 13 July 1872.

Bracebridge Selina. Born 1803. Married Charles Holt Bracebridge 1823. Lifelong friend of Florence Nightingale, referred to as Sigma in F.N.'s correspondence. Died at Atherstone Hall, 31 January 1874.

Bryce Charles. Civil Surgeon. Served at Scutari from 1 April 1855 to 15 May 1856.

Burrell William Henry. Born Edinburgh 1795. MD.Edin. 1817. Hospital Assistant 1815. Half pay 1817. Assistant Surgeon, 38th.Foot 1821. Assist.Surg. 72nd.Foot 1822. Staff surgeon 2nd.Class 1826. Staff Surgeon 1st.Class 1834. Surgeon 77th.Foot 1837. Appointed Principal Medical Officer to Expeditionary Force to East, 1854. Superceded by Dr.Hall on enlargement of Expeditionary Force. Resigned 1854. Died Exmouth 1866.

Burton Edward John. Born 1814. MD.Edin.1836. Assistant Surgeon, Royal African Colonial Corps 1838. Assistant Surgeon, 25th.Foot 1841. Surgeon, 5th.Fusiliers 1849. Staff Surgeon 2nd.Class 1850. Service in Crimea and at Scutari 1855-56. Staff Surgeon 1st.Class 1855. Retired 1864. Died, Brighton 13 October 1897.

Chenery Thomas. Born Barbados 1826. Educ. Eton and Cambridge. Barrister, Middle Temple. Times correspondent in Constantinople 1854-56. Professor of Arabic, Oxford University 1868-77. Editor, Times 1877-84. Died London 1884.

Cooper, Robert. Born 24 May 1818.

Assistant Staff Surgeon 1843. Staff Surgeon 2nd.Class 1853.
Surgeon, Dragoon Guards 1854. Service in Scutari, Bulgaria
and the Crimea. Retired on half pay 1862.

Died in London, 4 December 1864.

Crerar, James. Born Nova Scotia 15 September 1823.

Assistant Surgeon, 76th.Foot, 1847. Assistant Surgeon, 60th.
Foot, 1852. Staff Surgeon 2nd.Class 1854. Service in Crimea
and Scutari 1854-56. Surgeon 50th.Foot 1855. Staff Surgeon
1st.Class 1859. Retired 1878.

Died in Chelsea, 21 April 1885.

Cruikshank, William. Born, 1805.

Hospital Assistant, 1827. Assistant Staff Surgeon, 1829.
Assistant Surgeon, 79th.Foot, 1830. Staff Surgeon 2nd.Class
1836. Surgeon, 93rd.Foot, 1837. Surgeon, 71st.Foot, 1843.
Surgeon, 52nd.Foot, 1843. Staff Surgeon 1st.Class 1854.
Service in Scutari and Crimea 1854-56. Deputy Inspector
General 1855.

Died at Simla, 5 November 1858.

Cumming, Alexander. Born Aberdeen, 1790.

MA.Aberdeen 1812. MD.Aberdeen 1820. Hospital Assistant 1814.
Half pay 1816. Full pay 1817. Assistant Surgeon, 67th.Foot.
1824. Service in Burma war, 1826. Surgeon, 74th.Foot 1835.
Staff Surgeon 1st.Class, 1846. Deputy Inspector General, 1852.
Member of the Hospital Commission sent to Crimea and Scutari,
1854. Inspector General, 1854. Principal Medical Officer,
Scutari, 1854-55. Retired, 1856.
Died 4 December 1858.

Delane, John Thadeus. Born 1817.

Educated King's College, London and Magdalene Hall, Oxford.
Barrister, Middle Temple, 1847. Editor of Times 1841-1877.
Died in London, 1879.

Delmege, Collis Christopher John. Born 1812.

MD Edin. 1832. Assistant Surgeon, 27th.Foot 1835. Staff
Surgeon 2nd.Class 1846. Staff Surgeon 1st.Class 1854.
Served in Scutari 1854-56. Half pay 1861.

Died 1 September 1861.

Denny, William. Born 11 November 1813.

Assistant Staff Surgeon 1837. Assistant Surgeon, 58th.Foot 1842. Staff Surgeon 2nd.Class 1846. Surgeon, 34th.Foot 1848. Surgeon, 14th.Foot 1854. Staff Surgeon 1st.Class 1855. Served in the Crimea, at Scutari and on the expedition to Kertch. Half pay 1856. Died 7 November 1860.

Dumbreck, Sir David. Born Aberdeen 27 October 1805.

MD.Edinburgh 1830. Hospital Assistant 1825. Assistant Surgeon, 77th.Foot 1826. Staff Surgeon 2nd.Class 1834. Surgeon 88th.Foot 1840. Surgeon, 72nd.Foot 1841. Staff Surgeon 1st.Class 1847. Deputy Inspector General 1854. Service in Scutari, the Crimea and Bulgaria. Inspector General 1859. Resigned 1860. CB.1856. QHP.1864. KCB.1871. Died in Florence 24 January 1876.

Eames, James Alexander. Assistant Surgeon June 1854. Service in Crimea and at Scutari. Resigned July 1855.

Evans, Usher Williamson. Born Mallow, County Cork 15 February 1823.

MD.Glasgow 1844. Assistant 16th.Dragoons 1846. Staff Surgeon 2nd.Class 1854. Service in Scutari and the Crimea. Surgeon, 15th.Foot 1859. Staff Surgeon 1st.Class 1861. Surgeon Major 1866. Retired 1871. Died in Clifton 27 August 1912.

Fernandes, Ferdinand. Born Glasgow 1828.

Medical Storekeeper at Scutari 1854-55. Captain of Orderlies; Army Hospital Corps 1873. Retired 1886. Died in Folkstone 11 November 1907.

Fitzgerald, Thomas George. Born London 23 June 1828.

Assistant Staff Surgeon 1852. Served in Gallipoli, Scutari and the Crimea. Staff Surgeon 2nd.Class 1859. Surgeon Major 1872. Retired 1877. Died Haverstock Hill 18 June 1881.

Forrest, John. Born 1804.

MD.Edinburgh 1825. Hospital Assistant 1825. Assistant Surgeon, 20th.Foot 1826. Staff Surgeon 2nd.Class 1832. Staff Surgeon 1st.Class 1840. Surgeon, 75th.Foot 1850. Deputy Inspector General 1854. Service in the Crimea and at Scutari 1854-56. Inspector General 1858. Retired 1861. CB. 1856. QHP.1859. Died at Bath 10 September 1865.

Fraser, Peter. Civil Surgeon. Served in Scutari 27 March 1855-
30 May 1856.

Furlonge, Thomas. Assistant Surgeon, St.Helena Regiment 1854.
Assistant Staff Surgeon August 1854. Service in Scutari
1854.
Died at sea 6 October 1854.

Glover, Robert Michael. Civil Surgeon. Served in Scutari
26 May 1855 - 30 January 1856.

Gordon, Archibald. Born 14 February 1812.
MD.Edinburgh 1834. Assistant Staff Surgeon 1836.
Assistant Surgeon, 35th.Foot 1836. Assistant Surgeon, 53rd.
Foot 1844. Surgeon 95th.Foot 1848. Staff Surgeon 1st.Class
1854. Service in Scutari, Bulgaria and the Crimea.
Deputy Inspector General 1856. Inspector General 1867.
Reired 1870.
CB.1856. QHS.1871.
Died 3 August 1886.

Gorringe, John. Born Calcutta 24 June 1824.
Assistant Surgeon, 59th.Foot 1849. Assistant Surgeon Ist.
Dragoons 1852. Staff Surgeon 2nd.Class 1854. Service in
Crimea and at Scutari. Surgeon4th.Foot 1857. Staff Surgeon
1st.Class 1867. Surgeon Major 1869.
Died in Cambridge 4 August 1870.

Grant, John. Born 30 May 1809.
Assistant Surgeon 1837. Surgeon 79th. Foot 1846. Service in
Crimea and at Scutari. Retired half pay 1866.
Died 23 September 1883.

Grieg, David. Born Edinburgh 1831.
MD.Edinburgh 1853. Assistant Staff Surgeon 1854. Service in
Scutari. Retired 1856.

Grylls, William Richard.
Assistant Staff Surgeon 1854. Assistant Surgeon 19th.Foot
1854. Assistant Surgeon 6th.Dragoons 1855. Service in Crimea.
Resigned 17 October 1856.

Guthrie, George James. Born London 1 May 1785.

MRCS.London 1801. Assistant Surgeon York Hospital, Eaton Square 1805. Assistant Surgeon 29th.Foot 1808. Served in Canada and on the Peninsula 1808-1814. Present at Waterloo 18 June 1815. Resigned 1816. Founded Westminster Eye Hospital. Assistant Surgeon Westminster Hospital 1823. Surgeon 1827. President of Royal College of Surgeons 1833, 1841 and 1854.

Died in London 16 May 1856.

Hall, Sir John. Born Little Beck, Westmoreland 15 November 1795.

MD.St.Andrews 1845. Hospital Assistant 1815. Assistant Staff Surgeon 1822. Staff Surgeon 2nd.Class 1827. Surgeon, 33rd.Foot 1829. Staff Surgeon 1st.Class 1841. Deputy Inspector General 1846. Service in Kaffir wars 1847 and 1850-51. Inspector General and PMO. India 1852. PMO to Expeditionary Force 1854-56. Retired 1857.

Kt.Legion of Honour 1856. Order of Medjidie 1856. KCB 1857. FRS.Edinburgh 1858.

Died in Pisa 17 January 1866.

Hooper, Lucas George. Born Jersey 24 September 1831.

Assistant Staff Surgeon 1854. Service in Crimea and Scutari. Assistant Surgeon, 10th.Hussars 1855. Staff Surgeon 2nd.Class 1865. Surgeon Major 1865. Retired 1877.

Died 25 August 1909.

Hume, Thomas David. Born 24 September 1808.

Hospital Assistant 1826. Assistant Surgeon 84th.Foot 1827. Assistant Surgeon 43rd.Foot 1834. Staff Surgeon 2nd.Class 1841. Surgeon, 82nd.Foot 1842. Staff Surgeon 1st.Class 1852. Deputy Inspector General 1855. Service in Scutari and the Crimea. Inspector General 1861. Retired 1865.

Died at Southsea 16 March 1888.

Humfrey, William Charles. Born 1804.

BA.Trinity College Dublin 1822. Hospital Assistant 1826. Assistant Surgeon 35th.Foot, 1827. Assistant Surgeon, 95th. Foot 1830. Staff Surgeon 2nd.Class 1841. Staff Surgeon 1st. Class 1851. Deputy Inspector General 1854. Service in Scutari, the Crimea and in Smyrna. Inspector General 1858. Died 28 April 1862.

Ivey, William Frederick. Born Lisbon 25 August 1819.

Assistant Staff Surgeon 1845. Assistant Surgeon, 6th.Foot 1851. Surgeon, 31st.Foot 1854. Service in Crimea. Surgeon Major 1865. Retired 1871. Medical Officer at Tower of London 1871-1891.

Died in London 12 August 1891.

Jameson, Thomas Ross. Born St.Andrews 1810.

MA.St.Andrews 1826.MD.Edinburgh 1830. Assistant Staff Surgeon 1834. Staff Surgeon 2nd.Class 1843. Surgeon 91st.Foot 1851. Staff Surgeon 1st.Class 1834. Service in Scutari, Bulgaria, the Crimea and Abydos. Deputy Inspector General 1858. Inspector General 1865. Retired 1867. Died 6 July 1886.

Jenner, Kentish. Purveyor 1853. Served in Scutari 1854-55. Principal Purveyor 1860. Retired 1869. Died before 1881.

Jephson, William Holmes. Born 6 August 1818.

MD.Glasgow 1843. Assistant Surgeon, 61st.Foot 1844. Assistant Surgeon, 9th.Dragoons 1850. Assistant Surgeon, 96th.Foot 1854. Service in Crimea and Scutari. Staff Surgeon 2nd.Class 1855. Surgeon 1st.Dragoon Guards 1855. Surgeon Major 1st. Dragoon Guards 1864. Deputy Inspector General 1867. Died Mean Meer, Bengal 7 April 1870.

Joseph, James. Apothecary. Medical Storekeeper Scutari 10 February 1855 - 29 July 1856.

Laing, Patrick. Assistant Surgeon 86th.Foot 1842. Assistant Staff Surgeon 1854. Service in Scutari. Surgeon, 23rd.Foot 1857. Surgeon Major 1862. Staff Surgeon 1st.Class 1865. Retired 1868. Died London 7 February 1892.

Lamont, James. Born Port Macquarie, New South Wales 18 March 1831. MD.Edinburgh 1852. Assistant Staff Surgeon 1852. Assistant Surgeon, 41st.Foot 1853. Died before Sebastopol 5 January 1855.

Langley, William Leslie. Born 16 January 1813.

MD.Glasgow 1836. AssistantStaff Surgeon 1841. Assistant Surgeon 46th.Foot 1845. Staff Surgeon 2nd.Class 1847. Surgeon, 87nd.Foot 1847. Staff Surgeon 1st.Class 1854. Service in Scutari. Deputy Inspector General 1867. Retired 1868. Died 7 October 1882.

Larrey, Dominique Jean, 1st Baron. Born Beaudeau 8 July 1766. Studied medicine at Toulouse University. Present at the storming of the Bastille 13/14 July 1789. Surgeon, Army of the Rhine 1792. Served in Italian campaign 1797. Designed first vehicle for the carriage of the wounded from the field, the Flying Ambulance. Organized teams of doctors and orderlies to aid the wounded. Surgeon-in-Chief Napoleon's Army in the East 1798. Surgeon to the Imperial Guard 1806. Served on Peninsula 1808-1809. Present at the battle of Borodino 7 September 1812. Wounded and captured by Prussians at Waterloo 15 June 1815. Subsequently returned to Paris but unable to find employment until 1820. Finally re-instated and awarded pension by authorities. Appointed Surgeon-in-Chief at the Hôtel des Invalides 1832. Professor of Clinical Surgery at Val-de-Grace 1842. Died in Paris 25 July 1842.

Lawson, Robert. Born Aberdeenshire 1815. MA.Aberdeen 1830. Assistant Staff Surgeon 1835. Assistant Surgeon, 47nd.Foot 1840. Surgeon, 43rd.Foot 1845. Staff Surgeon 1st.Class 1846. Deputy Inspector General 1854. PMO. Balaclava 1854. Publicly censured by Lord Raglan on 13 December 1854 for the alleged neglect of sick and wounded soldiers on board the Avon. Subsequently transferred to Scutari. Inspector General 1867. Retired 1872. QHP. 1873. LLD.Aberdeen 1885. Died in Aberdeen 8 February 1894.

Linton, Sir William. Born 1801. MD.Glasgow 1834. Hospital Assistant 1826. Assistant Surgeon, 66th.Foot 1827. Staff Surgeon 2nd.Class 1841. Staff Surgeon 1st.Class 1848. Deputy Inspector General 1854. Service in Scutari, Bulgaria and the Crimea. Inspector General 1858. PMO.India 1861-63. Retired 1863. CB.1856. QHP.1859. KCB.1865. Died 9 October 1880.

Llewellyn, Jenkin Homfray. Born Calcutta 21 July 1821. Assistant Surgeon 44th.Foot 1848. Assistant Surgeon 7th.Dragon Guards 1850. Staff Surgeon 2nd.Class 1855. Service in Scutari and Crimea. Surgeon 2nd.Dragoons 1856. Surgeon 8th.Hussars 1858. Retired 1860. Died in Tunbridge Wells 15 May 1867.

Lougham, Joseph Fletcher. Born 23 April 1831. Assistant Staff Surgeon 1854. Assistant Surgeon, Rifle Brigade 1855. Service in Scutari and the Crimea. Staff Surgeon 2nd.Class 1863. Staff Surgeon 1st.Class 1867. Retired 1875. Died Colinton, Midlothian 20 October 1876.

Lyons, Richard. Civil Surgeon. (Pathologist) Served in Scutari and the Crimea from 28 April 1855 until 8 January 1856.

Mackey, Peter. Born 1 May 1819.

MD.Glasgow 1844. Assistant Surgeon 9th.Foot 1844. Staff Surgeon 2nd.Class 1854.
Died in Balaclava 2 October 1854.

MacGregor, James. Born 2 August 1809.

MA.St.Andrews 1823. Assistant Surgeon 39th.Foot 1834.
Staff Surgeon 2nd.Class 1844. Surgeon 28th.Foot 1845. Staff Surgeon 1st.Class 1854. Service in Bulgaria and at Scutari.
Deputy Inspector General 1862.
Died in Clifton 1867.

MacClise, William. Born 2 September 1817.

Assistant Surgeon 90th.Foot 1842. Service in Kaffir war 1846-47.
Staff Surgeon 2nd.Class 1854. Service in Scutari, Bulgaria and the Crimea. Surgeon 27th.Foot 1855. Retired 1856.
Died 6 May 1861.

Maxwell, Sir Peter Benson QC. Born 1817.

BA.Trinity College, Cambridge 1839. Barrister Middle Temple 1841. Chairman of the Hospital Commissioners sent to the East by the Duke of Newcastle in 1855. Knighted 1856. Recorder of Penang 1856-66. Chief Justice of Singapore 1866-71. Chief Justice of Straits Settlement 1871-1885.
Died 1893.

McGrigor, Alexander. Born 1812.

MD.Glasgow 1848. Assistant Staff Surgeon 1833. Assistant Surgeon, 92nd Foot 1833. Staff Surgeon 2nd.Class 1836. Surgeon, 32nd.Foot 1836. Surgeon, 71st.Foot 1843. Surgeon, 6th.Dragoons 1852.
Staff Surgeon 1st.Class 1854. Deputy Inspector General 1855.
Superintendent of the Barrack Hospital, Scutari 1854-55.
Died in Scutari from fever 19 November 1855.

McGrigor, Sir James. Born Cromdale, Invernesshire, 1771.

MA.Aberdeen 1788. Studied medicine at Aberdeen and Edinburgh.
MD.Aberdeen 1804. Surgeon, Connaught Rangers 1793. Service in Flanders, India, Ceylon and Egypt. Deputy Inspector General 1805. Inspector General 1809. PMO to Duke of Wellington during Peninsular campaign. Described by the duke as " One of the most industrious and successful public servants I have ever met with." Director of Army Medical Department 1815-51.
Knighted 1814. KHP.1816. Raised to a Baronetcy 1830. QHP.1837.
Died in London 2 April 1858.

McIntosh, John. Born 2 July 1800.

Apothecary. Dispenser of medicines in Scutari from April to August 1854.

Died in Cape Town 17 January 1894.

Meddoes, Robert Wyatt. Born Kensington 10 August 1832.

Assistant Surgeon, 9th.Foot 1854. Service in Crimea and at Scutari. Surgeon, Canadian Rifle Regiment 1857. Staff Surgeon 2nd.Class 1865. Surgeon, 68th.Foot 1869. Surgeon Major 1869. Brigadier Surgeon 1879. Deputy Surgeon General 1883. Surgeon General 1889. Retired 1892.

Died in Saltash, Cornwall 8 November 1911.

Menzies, Duncan. Born 8 November 1803.

Hospital Assistant 1827. Assistant Staff Surgeon 1830.

Assistant Surgeon, 16th.Foot 1833. Staff Surgeon 2nd.Class 1842. Surgeon, 45th.Foot 1843. Staff Surgeon 1st.Class 1852.

Deputy Inspector General 1854. PMO.Scutari June 1854 - January 1855. Retired 1856.

Died in Paddington, London 7 July 1875.

Miles, William Wilson. Born Slane, County Meath 2 September 1830.

Assistant Surgeon, 63rd.Rifles 1854. Service in Crimea.

Staff Surgeon 2nd.Class 1864. Surgeon, 60th.Rifles 1867.

Died in St.John, New Brunswick 13 November 1868.

Mitchell, John. Born 29 February 1808.

MD.Edinburgh 1828. Assistant Staff Surgeon 1832. Assistant Surgeon, 86th.Foot 1833. Assistant Surgeon, 48th.Foot 1837.

Staff Surgeon 2nd.Class 1839. Surgeon, 78th.Foot 1844.

Staff Surgeon 1st.Class 1854.

Died in Scutari 24 September 1854.

Mouat, Sir James V.C. Born 1815. Son of Surgeon Mouat of 13th.Dragoons.

Assistant Surgeon, 44th Foot 1838. Surgeon, 9th.Foot 1848.

Surgeon 6th.Dragoons 1854. Service in Scutari and Crimea.

Staff Surgeon 2nd.Class 1855. Deputy Inspector General 1858.

Inspector General 1864. Surgeon General 1864. Retired 1876.

Legion of Honour 1856. CB.1856. VC.1858. QHS.1888. KCB.1894

Mouat was awarded the Victoria Cross in 1858 for his gallant conduct during the battle of Balaclava 25 October 1854 when he went to the assistance of Major Morris of the 17th Lancers who had been wounded during the charge of the Light Brigade. Morris was lying within range of the Russian infantry and Surgeon Mouat, at risk to his own life, tended to his wounds thus saving his life.

Mouat died in Kensington 4 January 1899.

Muir, Sir William Mure. Born 24 January 1818.

MD.Edinburgh 1840. Assistant Surgeon, 42nd.Foot 1842.

Surgeon, 33rd.Foot 1854. Service in Crimea. Deputy
Inspector General 1858. Inspector General 1861.

Director General of Army Medical Department 1874-1882.

OHP.1868. KCB.1873.

Died in Blackheath 2 June 1885.

O'Flaherty, Richard James. Born 9 December 1811. Assistant Staff
Surgeon 1835. Assistant Surgeon 83rd.Foot 1837.

Staff Surgeon 2nd.Class 1845. Staff Surgeon 1st.Class 1854.

Service in the Crimea and at Scutari. Deputy Inspector
General 1859. Inspector General 1872.

CB.1871.

Died in Bombay 8 December 1874.

Osborne, The Rev.and Hon. Sidney Godolphin. Born Cambridge 5 February 1808.

Educated Rugby and Brasenose College, Oxford. BA.1830.

Rector of Stoke Poges 1832. Rector of Durweston, Dorset 1841-75.

Travelled to Scutari during war in the East and made an unofficial
inspection of the military hospitals. Published his findings in
Scutari and its Hospitals.(1855) Was extremely critical of the
Army Medical Department.

Died in Lewes 9 May 1889.

Parkes, Edmund Alexander. Born in Oxford 29 March 1819.

MB.London 1841. MD.1846. Assistant Surgeon, 84th.Foot 1842.

Resigned 1845. Travelled to Turkey in 1855 and took charge
of the civil hospital at Renkoi on the Dardanelles.

Appointed Professor of Military Hygiene at the Army Medical
School, Chatham 1860.

FRCP.1854. FRS.1861.

Died in Southampton 15 March 1876.

Paulet, Lord William. Born 7 July 1804. 4th.Son of 13th.Marquis of
Winchester. Educated Eton . Ensign 85th.Light Infantry 1821.

Lieutenant 7th.Fusiliers 1830. Major 68th.Light Infantry 1836.

Lieut.Col.1843. Service in Gibraltar, West Indies and North
America. Brevet Col.1854. Served in Crimea as Assistant Adjutant
General, Cavalry Division 1854. Present at battles of Alma and
Inkerman. Appointed Military Commandant on the Bosphorus,
Gallipoli and the Dardanelles thus commanding military hospitals
in Turkey 23 November 1854 - 30 September 1855. Commanded
Light Division in Crimea September 1855 - June 1856.

Major General 1858. Lt.General 1867. Adjutant General 1865-70.

General 1874. Field Marshal 1886.

KCB.1865. GCB.1870.

Died 19 June 1883.

Paynter, Joshua. Born 12 February 1814.

Assistant Staff Surgeon 1839. Assistant Surgeon 60th.Foot 1839. Service in Kaffir war 1846-47. Surgeon, 73rd.Foot 1848. Surgeon, 13th.Dragoons 1850. Service in Scutari, Bulgaria and the Crimea. Staff Surgeon 1st.Class 1855. PMO.1st.Division. Deputy Inspector General 1858. Inspector General 1867. Retired 1872. CB.1871. Died in Tenby 19 June 1883.

Pincoffs, Peter. Civil surgeon. Served in Scutari from 24 April 1855 until 28 April 1856.

Prendergast, Joseph Samuel. Born 12 September 1810.

MD.Edinburgh 1835. Assistant Surgeon, 77th.Foot 1836. Staff Surgeon 2nd.Class 1846. Staff Surgeon 1st.Class 1854. Service in Scutari, Bulgaria and the Crimea. Deputy Inspector General 1862. Retired 1863. Died at Bath 20 November 1899.

Ramsay, William. Born Strabane, Co.Tyrone 27 January 1835.

Assistant Staff Surgeon 1854. Service in Crimea and at Scutari. Staff Surgeon 2nd.Class 1861. Surgeon, Royal Canadian Rifle Regiment 1865. Staff Surgeon 1st.Class 1867. Surgeon, 75th.Foot 1868. Surgeon Major 1868. Died in Pietermaritzburg, Natal 16 June 1873.

Reade, Sir John By Cole. Born Canada 7 July 1832, son of Staff Surgeon George Hulme Reade. Assistant Staff Surgeon 1854. Assistant Surgeon, Rifle Brigade 1855. Staff Surgeon 2nd.Class 1864. Surgeon, Rifle Brigade 1865. Staff Surgeon 1st.Class 1872. Deputy Surgeon General 1887. Surgeon General 1888. Assistant to Director General of Army Medical Department 1888-1893. CB.1886. QHS.1895. KCB.1903. Died in London 5 November 1914.

Roberts, Frederic.

Assistant Staff Surgeon 1837. Assistant Surgeon 59th.Foot 1837. Staff Surgeon 2nd.Class 1846. Surgeon 89th.Foot 1853. Staff Surgeon 1st.Class 1854. Service in Crimea and Scutari. Died in Benares 22 June 1858.

Rowden, Harry. Civil surgeon. Served in Scutari from 25 March 1855 until 30 January 1856.

Rutherford, William. Born 25 February 1816.

BA.Trinity College, Dublin 1835. MD.Glasgow 1847.

Assistant Staff Surgeon 1841. Assistant Surgeon, 62nd.Foot
1842. Staff Surgeon 2nd.Class 1852. Service in Crimea and
Scutari. Deputy Inspector General 1861. Surgeon General
1874. Retired 1876.

CB.1867. QHP.1880.

Died 24 March 1887.

Simpson, William. Born Aberdeenshire 2 May 1821,

MB.Aberdeen 1842. MD.1859.

Assistant Staff Surgeon 1846. Assistant Surgeon, 71st.Foot
1850. Staff Surgeon 2nd.Class 1854. Service in Crimea

Died Murree, Bengal 3 October 1864.

Smith, Sir Andrew. Born Roxburgh 1797.

MD.Edinburgh 1819. Hospital Assistant 1816. Assistant
Surgeon 98th.Foot 1825. Assistant Staff Surgeon 1826.

Served in Cape 1826-38. Conducted scientific study of
flora and fauna of South Africa. Staff Surgeon 1st.Class

1837. Deputy Inspector General 1845. PMO.Fort Pitt, Chatham

1845. Assistant to Director General, Sir James McGrigor 1846 -
1853. Director General Army Medical Department 1853-58.

KCB.1858. FRS.1850. FRCS.Edin.1856. LLD.Edin.1859. FRCP.1860

Died 12 August 1872.

Somers, Henry. Born Dublin 24 November 1819.

MD.Glasgow 1845. Assistant Surgeon, 73rd.Foot. 1845.

Assistant Surgeon, 8th.Dragoons 1846. Staff Surgeon 2nd.

Class 1854. Service in Scutari. Surgeon, 55th.Foot 1860.

Died in London 6 July 1861.

Soyer, Alexis Benoit. Born Meaux-en-Brie 1809.

Appointed Chef to newly established Reform Club 1838.

Wrote Simplified cooking for the Army (1855)

Travelled to Scutari at own expense to assist Florence

Nightingale. Designed the Soyer stove. Returned to England
in 1856.

Died in St.John's Wood 5 August 1858.

Spence, Thomas. Born 1806.

MD.Glasgow 1841. Hospital Assistant 1826. Assistant Staff
Surgeon 1827. Assistant Surgeon, 52nd.Foot 1830. Staff

Surgeon 2nd.Class 1839. Deputy Inspector General 1854.

Assistant to Director General 1854.

Drowned on board S.S.Prince in Balaclava Bay 14 November 1854.

Stafford, Augustus. Born 1811.

Educated Trinity College, Cambridge.

Member of Parliament for Northamptonshire North from 1841 - 1857. Secretary to Admiralty 1852. Travelled to Scutari in 1854 to inspect the military hospitals. Died 15 November 1857.

Stanley, Mary. Born Alderly, Cheshire 1814, daughter of Edward Stanley, Bishop of Norwich. Travelled to Scutari with second party of nurses in 1855. Rejected by Florence Nightingale she returned to England in despair. On her return from the East assisted her brother, Arthur Penrhyn Stanley in charitable works in London and Lancashire. Died in London in 1879.

Stowe, William Henry. Born 1825.

Educated Wadham College. BA.1848. Fellow of Oriel College, Oxford 1852. Barrister Lincoln's Inn 1852. Sent to Crimea as almoner of Times fund in March 1855.

Died in Balaclava of fever 20 June 1855.

Stuart, James. Born 10 March 1807.

Assistant Staff Surgeon 1833. Assistant Surgeon 70th.Foot 1833. Surgeon, Ceylon Rifle Regiment 1843. Staff Surgeon 1st Class 1854. Service in Crimea. Died in Portsmouth 10 March 1856.

Sunter, Thomas Moore. Born 30 September 1817.

BA.Trinity College, Dublin 1834. MB.Edinburgh 1841. MD.1862. Assistant Surgeon, 7th.Foot 1843. Staff Surgeon 2nd.Class 1854. Service in Crimea and at Scutari. Staff Surgeon 1st.Class 1858. Retired 1862. Died in Heston 19 October 1900.

Taylor, George. Born Lessendrum, Aberdeenshire 22 February 1808.

MA.Aberdeen 1826. MD.Glasgow 1852. Assistant Surgeon, 22nd.Foot 1834. Assistant Surgeon, 93rd.Foot 1837. Surgeon, 81st.Foot 1845. Surgeon, 6th.Dragoon Guards 1852. Service in Scutari and Crimea. Staff Surgeon 1st.Class 1855. Deputy Inspector General 1858. Died 8 May 1867.

Terrot, Sarah Anne. Born Edinburgh 1829. Second daughter of Charles Terrot, Bishop of Edinburgh.
Entered Sellonite Order 1847. Amongst the party of nurses and nuns accompanying Florence Nightingale to Scutari.
Served in Barrack Hospital and General Hospital 1854-55.
Returned to London 1855. Awarded Royal Red Cross by Queen Victoria in 1890.
Died in Edinburgh 1902.

Thornton, Robert. Born 2 July 1822.
Assistant Surgeon, Ordnance Medical Department 1846. Surgeon, 9th.Foot 1855. Service in Crimea and Scutari. Staff Surgeon 2nd.Class 1859. Surgeon Major 1866. Surgeon, 109th.Foot 1870. Retired 1877.
Died 16 December 1884.

Tice, John Charles Graham. Born 26 May 1810. Son of Dr.Charles Tice, Deputy Inspector General, AMD.
Assistant Surgeon, 8th.Foot 1836. Surgeon, 69th.Foot 1846. Staff Surgeon 2nd.Class 1852. Staff Surgeon 1st.Class 1854. Service in Crimea and at Scutari. Deputy Inspector General 1858.
Died on passage from Calcutta to England 10 July 1862.

Ward, Lucas. Born 1786.
Purveyor's clerk 14 October 1809. Served on Peninsula.
Present at surrender of Paris 1815. Retired 1851. As one of the few men with experience of purveying in the field was brought out of retirement by Dr.Smith, commissioned and sent to Scutari. Was found to be slow and obstructive by medical staff and recommended for discharge by a medical board. Findings of medical board over-ruled by Lord Raglan.
Died of cholera in Scutari 1 January 1855.

Wilson, Robert. Born Stranraer, Wigtownshire 20 May 1825.
MD.Edinburgh 1845. Assistant Surgeon, 7th.Hussars 1848. Surgeon, 6th.Dragoons 1855. Staff Surgeon 2nd.Class 1855. Service in Crimea and Scutari.

Distinguished himself at the battle of Inkerman being mentioned in Lord Raglan's dispatches as follows.

" His Royal Highness (Duke of Cambridge) speaks also in the highest terms of the spirited exertions of Assistant Surgeon Wilson, of the 7th. Hussars, who at a critical moment rallied a few men which enabled them to hold the ground until reinforced."

Wilson retired on 1 January 1856 and was granted a military allowance until 31 December 1858.

Wrench, Edward Mason. Born London 1 July 1833.

Attended University College Hospital 1850-53. Assistant Surgeon, 34th. Foot 1854. Service in Crimea. Assistant Surgeon, 12th. Lancers 1856. Resigned 1862.

FRCS. 1870. Victorian Decoration 1893. MVO. 1907.

Died in Buxton 12 March 1912.

Wyatt, John. Born Bognor, Sussex 22 October 1825.

Assistant Staff Surgeon 1851. Assistant Surgeon, 5th. Dragoon Guards 1851. Assistant Surgeon, Coldstream Guards 1853. Service in Scutari, Bulgaria and the Crimea. Battalion Surgeon, Coldstream Guards 1857. Surgeon Major, Coldstream Guards 1863. Medical observer at French Headquarters during Franco-Prussian war 1870.

Wrote History of Coldstream Guards during campaign in the East. (1858)

FRCS. 1866. CB. 1873.

Died 2 April 1874.

Young, Edward. Born London 22 January 1822.

MD. Edinburgh 1846. Assistant Staff Surgeon 1846. Assistant Surgeon, 11th. Foot 1851. Staff Surgeon 2nd. Class 1854. Service in Crimea and at Scutari. Surgeon, 60th Rifles 1858. Surgeon Major 1874.

Died in Southsea 1 February 1893.

SOURCES AND BIBLIOGRAPHY.

Unpublished sources.

- Cattell papers. Letters, diaries and papers of Staff Surgeon William Cattell.
Deposited in the Muniment Room, Royal Army Medical College, Milbank.
- Clutterbuck letters. Letters of Ensign J.Hulton Clutterbuck, 63rd.Regiment. Written from Turkey and Crimea. July - November 1854
Deposited in the Central Library, Manchester.
- Cumming letters. Letters of Inspector General of Hospitals Alexander Cumming, Hospital Commissioner and Principal Medical Officer, Scutari, 1854-55. Letters written to Dr.Hall between March and August 1855. (See Appendix 1.)
Author's private papers.
- De Sallis letters. Letters of Major Rudolph de Sallis, 8th.Hussars. Written from Crimea. August 1854 - December 1855.
Deposited in County Record Office, Chester.
- Farren papers. Letters, sketches and diaries of Major Richard Farren, 47th.Foot. (Later General Sir Richard) Written from Turkey and Crimea. February 1854 - August 1856.
Deposited in Muniment Room, Fulwood Barracks, Preston.
- Grieg letters. Letters of Assistant Surgeon David Grieg. Written from Scutari and Crimea. November 1854 - July 1855.
Deposited in Muniment Room, Royal Army Medical College, Milbank.
- Hall manuscripts. Diaries and papers of Sir John Hall, Principal Medical Officer to the Expeditionary Force. May 1854-August 1856.
Deposited in the Muniment room, Royal Army Medical College, Milbank.
- Hall letters. Letters and papers of Sir John Hall, 1854-1858.
Author's private papers.

- Hibbert letters. Letters of Major Hugh Hibbert, Royal Fusiliers. Written from Turkey and Crimea May 1855 - December 1856.
In the possession of Maj.Gen.Hugh Hibbert.
- Holt letters. Letters and papers of Surgeon William Holt, sometime medical officer, Russian Medical Department. Written from Sebastopol and Simpherol, August 1854 - January 1855.
Deposited in Manuscript Library, University of South Carolina.
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Preface.

- Ref.1. Parliamentary papers on the medical aspects of the war alone encompass eight separate reports together with a two volume medical and surgical history.
- Ref.2. Alexander William Kinglake. Author of Eothen, a popular Victorian travel book; travelled to the Crimea as a private citizen and then appointed himself the unofficial biographer of Lord Raglan for whom he had formed a great admiration. Subsequently, he published his Invasion of the Crimea, an eight volume history of the war. The first volume came out in 1863 and the last in 1887. Idiosyncratic, and far from objective (Kinglake had, for example, a particular dislike of the French Emperor, Napoleon III.) it remains a monumental work of scholarship.
- Ref.3. Parliamentary Papers. (1858) Medical and Surgical History of the British Army which served in Turkey and the Crimea during the war against Russia in the years 1854-55-56. Two volumes.
- Ref.4. Kirby Percival. (1965) Sir Andrew Smith. His life, letters and works.
- Ref.5. Cantlie, Sir Neil. (1973) A History of the Army Medical Department. Vol.2.
- Ref.6. Initially Smith was the chief target for the popular press although Hall, on being appointed K.C.B. in 1856, was described by Florence Nightingale as " a Knight of the Crimean burial grounds." In more recent accounts of the campaign Hall has become the chief recipient of criticism and is, for example, described as " this appalling man Hall," by one author (see Vulliamy's Crimea, p.205) and as " revengeful and powerful, the master of the confidential report, who entered upon his duties with a sense of injustice," by another.(see Woodham-Smith's Florence Nightingale, pp.208-210.)
- Ref 7. " Dr.Hall was not the man to overcome impossibilities, having neither the stature, nor the initiative, nor the social confidence to do so. He was a less attractive victim of circumstance."
Bonham-Carter V. (1968) Surgeon in the Crimea. p.148

" To Florence Nightingale must go most of the credit for putting things right...Her principal enemies were the stupidity and incompetence of the senior medical officers.
Barker A.J. (1970) The Vainglorious War. p.216

- Ref.8. Though the French medical service was far better equipped it was no more able to control the ravages of cholera than was the British, whilst the deaths from sickness amongst the Russian troops marching from the interior towards Sebastopol exceeded 100,000.
See Pennaneach J. (1956) Le Cholera Nautique de la mer Noire. Rev.Med.Nav.Xl.183.
See also: Parliamentary report on the organization of the Russian Medical Department.(1857) 135.Sess.1 IX.211.
- Ref.9. 711 Staff and Regimental surgeons, apothecaries and medical dressers saw service in the war in the East during 1854-56.
Med.and Surg.Hist of the Army (1858).Vol.1 pp.512-526.
- Ref.10. By January 1855, 4,761 patients were being nursed in Scutari, of whom 1,393 died, giving a ratio of 1 nurse to 158 patients. Had each nurse worked a 12 hour day without interruption and without moving from ward to ward she could have given each patient less than 4½ minutes attention daily. Since so many patients were gravely ill, it seems likely that Miss Nightingale and her nurses spent much longer with many fewer patients leaving the care of the majority to the male attendants.

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Part 1.

The Army Medical Department and the Military Machine.

Chapter 1.

Victorian medicine and the army medical department 1815-51. Pages 1 - 9.

- Ref.1. Blanco R.L.(1974) Wellington's Surgeon General. Sir James McGrigor. p.169.
- Ref.2. For a discussion of the social standing of the three groups see Parry and Parry,(1976) The rise of the medical profession. Chaps. 6-7. pp.104-161.
See also Newman,(1957) The evolution of medical education in the 19th.Century.
- Ref.3. The period 1800-1850 saw the foundation of the last four of London's teaching hospitals, Charing Cross; University College; King's College, and St.Mary's.

References. Part 1. Chapter 1: continued.

- Ref.4. The diagnostic confusion produced by fever was particularly evident in the reports of the medical staff of the A.M.D. during the campaign in the East when the fevers accompanying typhoid, typhus and malarial infections were designated intermittant, remittant and continuous.
See Med.and Surg.Hist.of the Army.(1858) Vol.2. p.129.
- Ref.5. The 600 Fellows of the Royal College of Physicians tended to be held in higher esteem than their surgical colleagues, not because their treatments were more effective but because they, as a group, tended to have been drawn from the ranks of the minor gentry.
- Ref.6. Dr.Andrew Smith, Director General of the A.M.D. during the campaign in the East had been encouraged in his scientific studies by Sir.James McGrigor and became the leading authority on the fauna of South Africa, an accomplishment acknowledged by his election to the Royal Society in 1858.
- Ref.7. Though not a scientist McGrigor, during his service on the peninsula, had developed an interest in medical epidemiology.
See McGrigor, Sir James (1861) The autobiography and services of Sir James McGrigor Bart.
- Ref.8. Edin.Med & Surg.Journal.(1817) Vol.3.pp 124-125.
- Ref.9. Public Record Office. War Office documents.
43/23 8223 f.4. 2 July 1830.
- Ref.10. General regulations for the Army. London (1816) p.6.
- Ref.11. Report of the Royal Commission on pay and promotion in the Army (1840) p.268.
- Ref.12. Ibid. p.271.
- Ref.13. Ibid. p.lxii.
- Ref.14. Blanco. Op.cit. p.178.
- Ref.15. Report of the Royal Commission on pay and promotion. (1840) p.271.
- Ref.16. Lancet Vol.2.(1848) p.77.
- Ref.17. Kirby P. Life of Sir Andrew Smith. (1965) p.272.

Chapter 2.

Pages 9 - 19.

- Ref.18. Higginson Gen. Sir Geo. (1916) 70 years of a Guardsman's life. p.85.
- Ref.19. For an account of the abuses to which the system was open see Thomas D. (1974) Charge! hurrah! hurrah! A life of Cardigan of Balaclava.
- Ref.20. See Bond B.(1971) The Victorian Staff College. p.26. Such views were still held by those in authority as late as World War II. See Douglas K.(1946) Alamein to Zem Zem. See also Douglas's Aristocrats pub. Faber's book of modern verse (1965) p.358.
- Ref.21. Harris.(1966) The recollections of Rifleman Harris. p.145.
- Ref.22. The prices of commissions had been fixed by Royal Warrant in 1821 and varied according to regiment. Thus a cornetcy in the Royal Horse Guards cost £1,200, and in the Dragoon Guards £850. An ensign's commission in the Foot Guards cost £1,200 and in the line regiments £450. Successive steps in promotion also varied from regiment to regiment; a Lieut.Colonel's commission in the Foot Guards stood at £9,000 and in the line regiments £4,500. Since there was usually competition for the higher ranks in the fashionable regiments the officer aspiring to gain promotion was likely to pay more than the officially recognised price to the officer surrendering his commission. By contrast there was little competition for promotion in the less fashionable regiments, particularly if serving abroad, and it was common for officers with sufficient means to exchange regiments by purchase if threatened with a posting overseas.
- In the years 1834-38 1,117 commissions were obtained by purchase against 293 granted by patronage but by 1855 the position had been reversed; 315 commissions being held by purchase and 1,065 being granted without purchase.
- See Jenkins G.H. (1977) The army in Victorian society. pp. 59-102.
- Ref.23. Bond. The Victorian Staff College. pp.49-65.
- Ref.24. Higginson. 71 years of a Guardsman's life. p.75.
- Ref.25. Ibid. p.76.

Part 1. Chapter 2: references continued.

- Ref.26. Woodward L (1962) The Age of Reform. pp.266-267.
- Ref.27. The uniform of the 11th.Hussars, designed by the Prince Consort at the request of Lord Cardigan and worn by the regiment at the charge of the Light Brigade.
See Thomas D. (1974) Charge! hurrah! hurrah! p.85.
- Ref.28. Though the authorities did little for the welfare of the men many regimental officers held more enlightened views, often subscribing towards the cost of canteens, rest rooms, and married quarters.
See Higginson. 71 years of a Guardsman's life. p.67.
- Ref.29. Queen's Regulations. 1 July 1844. para.32.
- Ref.30. In the tables of mortality Bermuda had a death rate of 28/1,000 and the Windward Islands 71/1,000; Of every 100 men posted to West Africa 72-80 died within a year.
See Cantlie N. A History of the Army Medical Department. Vol.1. pp.4-5.
- Ref.31. The cylindro-conical bullet had been invented in 1833 by Capt.Norton of the 35th.Reg. It had a hollow base which expanded when the propellant was ignited sealing in the expanding gases. It was improved in 1836 by Mr.Greener, a London gunsmith, who inserted a wooden plug into its base. The invention was rejected by the Ordnance Department but taken up in France by Capt.Minie who adapted Greener's designs and introduced the Minie bullet. The British government then paid Minie £20,000 for his patent and issued the Minie rifle in 1851 in time for it to be used in the Kaffir war. It was found to be effective at 500 yards, five times the range of the smooth bore musket. By 1853 the Enfield rifle had been adopted in its place but was not available in time for the landing in the Crimea.
See Wilkinson-Latham R.(1977) Antique guns. p.80. See also Fuller J. (1961) The conduct of war. p.88.
- Ref.32. By the 1850's the revolver had taken over in popularity from the single shot percussion pistol. The first successful model had been developed by Samuel Colt in America. Colt's most serious rival in Great Britain was Thomas Adams whose five shot revolver was popular with officers sailing for the Crimea.
See Wilkinson-Latham Antique guns. pp.67-68.
- Ref.33. Higginson. 71 years of a Guardsman's life. p.151.

- Ref.34. The British expeditionary force which landed in the Crimea was made up of five divisions of infantry and one of cavalry, the Royal Artillery siege train, and the Royal Naval Brigade. The work of the siege was carried out by the Royal Engineers.
- The 1st.Division was commanded by the Queen's cousin, the Duke of Cambridge, 35 years; the 2nd. by Sir George de Lacy Evans, a Peninsula veteran of 67; the 3rd. by Sir Richard English, 61 years; the 4th. by the Hon.Sir George Cathcart, 60 years; the Light Division by Sir George Brown, 64 years. The officer commanding the Cavalry Division was comparatively young at 54 years, whilst Lord Raglan's Chief Engineer, Sir John Burgoyne was aged 72 years.
- See Hibbert C.(1961) The destruction of Lord Raglan pp.14-15.

Chapter 3. The difficulties which faced Dr.Andrew Smith in March

1854.

Pages 19 - 28.

- Ref.35. Kinglake A.W. (1880) The invasion of the Crimea. Vol.VI. p.49.
- Ref.36. Med.and Surg. Hist. of the Army. (1858) Vol.1. Preface.
- Ref.37. Mitra S.M. (1911) The life and letters of Sir John Hall. p.295.
- Ref.38. Med.and Surg.Hist. of the Army (1858) Vol.I. pp.512-525.
- Ref.39. On 25 December 1795 the Royal Hospital Corps was formed on the island of Grenada; its establishment being a commanding officer, an adjutant, six sergeants, six corporals and 105 privates. This was increased by a further 75 men in April 1796. Few records of the corps remain but it seems that by June 1796 so many of its men had been stricken by disease that it had ceased to exist.
- See Fortesque Hon.J.W. A History of the British Army Vol.8. p.377.
- Ref.40. Director General's precis of correspondence. Vol.I. p.9.
- Ref.41. Parliamentary Papers. Second Report from the Select Committee on the Army before Sebastopol.(1855) p.412. Q/A.8218
- Ref.42. Sir James McGrigor's efforts to evacuate the wounded by ambulances during the peninsula campaign produced the

References. Part 1. Chapter 3 & 4.

- Ref.42.cont. the only outburst of anger exhibited by the Duke of Wellington towards his devoted medical officer in their long association. McGrigor describes how he told the duke of his actions whilst the great man was sitting for his portrait by Goya. Wellington " At once exclaimed against it, and said he would have no interruption to the movements of his army, which my plans would clog. On my explaining further, he warily said he would have no vehicle with the army but for the conveyance of guns, so that for the time being I was obliged to give up my plan as I saw he was strongly opposed to it. "
See McGrigor (1861) The autobiography and services of Sir James McGrigor.
- Ref.43. Kirby P. (1965) Sir Andrew Smith; his life and letters. p.291.
- Ref.44. 1st.Report of the Select Committee on the Army before Sebastopol. Question and answer 8218.
- Ref.45. Cantlie N. (1974) History of the Army Medical Department. Vol.2 p.14.
- Ref.46. Regulations affecting the sanitary condition of the Army (1858) Appendix 79. letter 18.
- Ref.47. Med.and Surg.Hist.of British army in the East. Vol.2. pp.469-481.
- Ref.48. Regulations affecting the sanitary condition of the Army in the East. (1858) Appendix 79. letter 25.
- Ref.49. Ibid. Appendix 79. letter 16.

Chapter 4. The diseases afflicting the expeditionary force during the years 1854-1856. Pages 28 - 34.

- Ref.50. Med.and Surg.Hist.of the Army.(1858)
- Ref.51. There were six cholera pandemics during the 19th.Century; 1817; 1829; 1852; 1863; 1881 and 1899. On each occasion the disease could be traced to an outbreak in Bengal from whence, over the course of 2 - 3 years, it spread to the western hemisphere. See Appendix 3. See also Pollitzer R. (1959) Cholera pp 18-48.

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- Ref.52. Winterton W. (1980) The Soho cholera epidemic of 1854.
History of Medicine. Vol.1. March/April 1980.
- Ref.53. Med.and Surg.Hist.of Army (1858) Vol.2.
p.60.
- Ref.54. Winterton W. (1980) Op.Cit.
- Ref.55. The vibrio cholerae, the organism causing the disease
was finally identified by Koch in 1883.
See Pollitzer R. (1959) Cholera. p.99.
- Ref.56. The incidence of the disease was proportionately lower
in the officers because they were better placed
to drink alcohol than the men.
- Ref.57. Med.and Surg.History of the Army.(1858) Vol.2. p.62.
- Ref.58. The vibrio cholerae so alters the biochemical balance
in the gut that the normal inflow of fluids and salts
is reversed. Thus the patient loses salt and water at a
rapid rate by vomiting and purgation and dies from
dehydration. The treatment of cholera consists of
replacing the salt and water lost by intra-venous
infusion. Such a treatment was suggested as early as
1832 by Thomas Latta, a general practitioner working in
Leith. Latta's researches were published in the medical
journals of the time but his methods never gained wide
acceptance.
See Morris R.J. (1976) Cholera 1832. pp.166-170.
- Ref.59. Med.and Surg.Hist.of the Army.(1858) Vol.2 p.80.
- Ref.60. Ibid. pp.129-170.
- Ref.61. Davidson S. (1970) The principles and practice of
Medicine. pp.579-591.
- Ref.62. Med.and Surg.Hist.of the Army.(1858) Vol.2. p.133.
- Ref.63. Ibid. p.163.

Part 2. A history of the army in the East 1854-56, with particular reference
to the medical and surgical problems which faced the Army Medical
Department.

Chapter 1. The British Army in Turkey and Bulgaria. Pages 35 - 44.

- Ref.1. For a discussion of the events leading to the
declaration of war see Temperley H.(1936)

References: Part 2 Chapter 1.

- Ref.1:cont. England and the Near East. The Crimea.
See also Clayton G.D. (1971) Britain and the Eastern Question. Missolonghi to Gallipoli. pp.94-117.
- Ref.2. Barker A.J. (1970) The Vainglorious War. pp.295-297.
- Ref.3. Director General's precis of correspondence Vol.1.
p.48.
- Ref.4. Med.and Surg.Hist.of Army (1858) Vol.2.
p.34.
- Ref.5. Cadogan's Crimea. (1979) Hamish Hamilton. London.
p.11.
- Ref.6. Russell letters. Sir Charles Russell to Mary Russell
25 June 1854.
- Ref.7. Med.and Surg.Hist.of Army.(1858) Vol.2. p.9.
- Ref.8. Lloyd C. & Coulter J.L.S. (1963) Medicine and the Royal Navy 1200 - 1900. Vol.IV. 1815-1900. pp.142-146.
- Ref.9. Wyatt.J. (1858) History of the 1st.Battalion Coldstream Guards during the Eastern Campaign. p.9.
- Ref.10. Hall, Sir John. Crimean diary. 21 July 1854.
- Ref.11. Russell W.H. (1966) Despatches from the Crimea 1854-1856. p.54.
- Ref.12. Vulliamy C.E. (1939) Crimea. p.78.
- Ref.13. Ibid. p.80.
- Ref.14. Russell letters. Sir Charles Russell to George Russell.
29 July 1854.
- Ref.15. Med.and Surg.Hist.of Army.(1858) Vol.2. p.88.
- Ref.16. Lord Aberdeen's feeling of guilt at the part he played in the declaration of war remained with him throughout the rest of his life. Among the many actions in his old age which seemed out of character was his refusal to rebuild or renovate a dilapidated church on his estate. On his death a text was found in his papers, written and re-written, which gave the key to the mystery.
" And David said unto Solomon, my son, as for me, it was in my power to build a house unto the name of the Lord My God. But the word of the Lord came to me saying, Thou hast shed blood abundantly and hast made great war. Thou shalt not build a house unto my name, because thou hast shed much blood upon the earth in my sight."
1 Chronicles, xxii, 7,8; vide n.571.
See Temperley H. (1936) England and the Near East. p.385.

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- Ref.17. Kinglake A.W. (1863) The invasion of the Crimea.
Vol.II p.107.
- Ref.18. Ibid. Vol.II. p.120.
- Ref.19. Ibid. Vol.II. p.121.
- Ref.20. Bonner Smith & Dewar (1948) Russian War 1854.
Baltic and Black Sea official correspondence. p.218.
- Ref.21. Mitra S.M. (1911) The life and letters of Sir John
Hall. p.316.
- Ref.22. Kirby.P.(1965) Sir Andrew Smith. pp.303-305.
- Ref.23. Heath, Admiral Sir Leopold. (1897) Letters from the
Black Sea. pp.49-52.

Chapter 2. The landing at Calamita Bay. Pages 18-19.

- Ref.24. Russell W.H.(1966) Russell's despatches from the Crimea
p.61.
- Ref.25. Report of the Select Committee on the army in the
Crimea and the East. (Roebuck Committee) (1855)
Vol.III. pp.489-491.
- Ref.26. Hall Sir John. Crimean diary. 16-17 September 1854.

Chapter 3. The battle at the river Alma and the flank march to
Balaclava. Pages 46-55

- Ref.27. Ibid. 20 September 1854.
- Ref.28. For the most detailed account of the battle see
Kinglake Vol.II pp.219-516. For a shorter account see
Baring Pemberton W. (1962) Battles of the Crimean war.
pp. 27-69. For an account of the battle as seen by the
Russians see Seaton A.(1977) The Crimean War. A Russian
Chronicle. pp.77-103.
- Ref.29. London Gazette. No.21606. 8 October 1854.

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- Ref.30. Wyatt J. (1858) The Coldstream Guards during the Eastern campaign. pp. 20-21.
- Ref.31. Parliamentary Papers. Report on the state of the hospitals of the British army in the Crimea and Scutari. 1854-55. (1855) xxxiii. 1. p.177.
- Ref.32. Russell W.H. Op.cit. p.101.
- Ref.33. Hall, Sir John. Crimean diary. 28 June 1854.

Chapter 4. The breakdown in medical administration at Scutari; September -
December 1854. Pages 56 - 71.

- Ref.34. Newcastle Papers. NeC.10,446 b. D.of N. to Augustus Stafford.
- Ref.35. 2nd.Report of the Select Committee on the army Sebastopol. (1855) p.370.
- Ref.36. Lawson G.(1968) Surgeon in the Crimea. pp.87-88.
- Ref.37. Report on the state of the hospitals of the British army in the Crime and Scutari. (1855) pp. 194-195.
- Ref.38. 2nd.Report of the Select Committee on the army before Sebastopol. (1855) p.520.
- Ref.39. Ibid. p.482.
- Ref.40. Ibid. p.482. A/9095.
- Ref.41. Ibid. p.380.. A/7771.
- Ref.42. Ibid. p.520. A/9677
- Ref 43. Med.and Surg.Hist.of the Army (1858). Vol.2. p.465
- Ref.44. Ibid. Vol.1. pp. 532-560.
- Ref.45. 2nd.Report of the Select Committee on the army before Sebastopol. (1855) p.523. A/9734

References. Part 2. Chapters 4 and 5.

- Ref.46. 2nd.Report of the Select Committee on the army before Sebastopol. Appendix 8. p.700.
- Ref.47. Ibid. Appendix 13. p.726.
- Ref.48. Ibid. Appendix 8. p.700.
- Ref.49. Ibid. Appendix 8. p.701.
- Ref.50. Director General's precis of correspondence. Vol.1. p.196. 15105/9F. 17 November 1854.
- Ref.51. 2nd.Report of Select Committee on army before Sebastopol. Appendix 13. p.726.
- Ref.52. Smith, Sir.Andrew. Crimean letters. ASL/1. A.S.to Dr.Hall 14 Sept.1854. Author's private papers.
- Ref.53. Director General's precis of correspondence. Vol.1. p.155.
- Ref.54. Newcastle papers. NeC.10446b. D.of N to Augustus Stafford.
- Ref.55. Newcastle papers. NeC.10442. D.of N. to Lord Stratford de Redcliffe.
- Ref.56. Woodham-Smith.C. (1950) Florence Nightingale p.136.
- Ref.57. Ibid. pp.140-141.
- Ref.58. Ibid. p.146.
- Ref.59. Newcastle papers. NeC.10442. D.of N. to Lord Stratford de Redcliffe.
- Ref.60. Director General's precis of correspondence. Vol.1. p.157.
- Ref.61. Stratford papers. Public Record Office. Foreign Office papers 352/40. Lord Clarendon to Lord Stratford.

Chapter 5. The commencement of the siege, October 1854. Pages 71 - 79.

- Ref.62. Seaton A. (1977) The Crimean war. A Russian chronicle. p.107.

References. Part 2. Chapters 5 and 6.

- Ref.63. Lord Raglan had been told by a civilian, Mr.Oliphant, who had visited Sebastopol a year earlier, that there were no landward defences to the south.
See Seaton A. The Crimean war. A Russian chronicle. p.116.
- Ref.64. Elphinstone H.C. (1859) Journal of the Corps of Royal Engineers. Part 1. pp.15-17.
- Ref.65. Lieut.Col. Franz Ivanovitch Todleben. Russian army engineer commanding defences of Sebastopol.
See Seaton A. p.133.
- Ref.66. Reilly W.E.M. (1859) An account of the artillery operations before Sebastopol. 1854-1855. p.35.
- Ref.67. Med.and Surg.History of the Army (1858)
Gen.Hosp>Returns. Vol.2. p.481.
- Ref.68. Ibid. Vol.2. p.357.
- Ref.69. Ibid. Vol.2. p.316.
- Ref.70. Ibid. Vol.2. p.278.
- Ref.71. Director General's precis of correspondence. Vol.1.
p.160.

Chapter 6. The cavalry battles of 25 October 1854.Pages 79 - 85.

- Ref.72. Seaton A. The Crimean war.A Russian chronicle. pp.139-140.
- Ref.73. Hibbert C. (1961) The destruction of Lord Raglan. pp.132-136.
- Ref.74. Thomas D. (1974) Charge! hurrah! hurrah!. pp.232-235.
- Ref.75. Ibid. p.240.
- Ref.76. Moyse-Bartlett H. (1971) Nolan of Balaclava. pp.216-222.
- Ref.77. Woodham-Smith C. (1953) The Reason Why. p.264.

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- Ref.78. De Sallis, Rudolph. Crimean letters. R.de S.to Lady de Sallis. 26 October 1854.
79. Director General's precis of correspondence.
Vol.1 p.168. 14,886/26C.

Chapter 7. The battle of Inkerman, 5 November 1854.Pages 85 - 90.

- Ref.80. Baring Pemberton W. (1962) Battles of the Crimean war. pp.117-119
- Ref.81. Gowing T. (1954) Voice from the ranks. p.47.
- Ref.82. Seaton A. (1977) The Crimean war. A Russian chronicle. p.176.
- Ref.83. The London Gazette. Number 21631. 22 November 1854.
- Ref.84. Hibbert C. (1961) The destruction of Lord Raglan. p.195.
- Ref.85. Saxe Weimar, Prince Edward of: RA. Fl/51. P.E. to Queen Victoria. 28 November 1854.
- Ref.86. Director General's precis of correspondence. Vol.1. p.182.
- Ref.87. Ibid. p.182.
- Ref.88. Saxe Weimar, Prince Edward of: RA. Fl/51. P.E. to Queen Victoria. 28 November 1854.
- Ref.89. Hibbert C. The destruction of Lord Raglan. p.204.

Chapter 8. Miss Nightingale's arrival in Scutari. Pages 90 - 102.

- Ref.90. Woodham-Smith C. (1950) Florence Nightingale. p.148.
- Ref.91. Terrot S.A. (1977) Sarah Anne's Journal. p.69.
- Ref.92. Ibid. p.70.
- Ref.93. Woodham-Smith C. Florence Nightingale. p.163.

References. Part 2. Chapters 8 and 9.

- Ref.94. Terrot S.A. Sarah Anne's journal. p.87.
- Ref.95. Grieg D. Ass.Surgeon. Crimean letters. D.G. to mother. 14 November 1854.
- Ref.96. Parliamentary papers. Regulations affecting the sanitary conditions of the Army. (1858) Appendix 79. Letter 912.
- Ref.97. Terrot S.A. Sarah Anne's journal. pp.94-95.
- Ref.98. Seymer L. (1950) Florence Nightingale p.50.
- Ref.99. Woodham-Smith C. Florence Nightingale. p.176.
- Ref.100. Terrot S.A. Sarah Anne's journal. pp.127-128.
- Ref.101. Woodham-Smith C. Florence Nightingale. pp.182-183.
- Ref.102. Ibid. p.184.
- Ref.103. Ibid. p.187.
- Ref.104. Newcastle papers. NeC.10,454. Mr.Benson Maxwell to Mr.Sidney Herbert.

Chapter 9. The Crimean Winter of 1854-55.Pages 102 - 110.

- Ref.105. Navy Records Society.(1948) Russian war, 1854. Official correspondence. Letter 88. p.366.
- Ref.106. Ibid. Letter 88: enclosure 4.
- Ref.107. Shervington C. (1979) Winter in the Crimea. Extracts from the journal of Capt.Charles Shervington, 46th.Reg. Journ.Army Hist.Research. Vol.57. p.28.
- Ref.108. Robbins M. (1967) Points and signals. A railway historian at work. pp.163-183.
- Ref.109. Ibid. p.28.
- Ref.110. Wrench E.M. Ass.Surgeon. Crimean letters. E.M.W. to E.Wrench senior. 16 December 1854.
- Ref.111. Ibid. 1 January 1855.
- Ref.112. Hall, Sir John. Hall MSS. F006/829.

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- Ref.113. Hall, Sir John. Crimean diary. 4 January 1854.
- Ref.114. Smith, Sir Andrew. Crimean letters. A.S. to Dr.Hall.. 12 Jan.1855. ASL./2. Author's private papers.
- Ref.115. Hall MSS. FCO6/829
- Ref.116. Russell W.H.(1966) Russell's despatches from the Crimea. p.160.
- Ref.117. Ibid. p.156.
- Ref.118. Hibbert C. The destruction of Lord Raglan. p.243.
- Ref.119. Russell W.H. Russell's despatches from the Crimea. p.160.
- Ref.120. Ibid. p.161.
- Ref.121. Wrench E.M. Ass.Surgeon. Crimean letters. E.M.W. to E Wrench senior. 1 Jan.1855.
- Ref.122. Director General's precis of correspondence. Vol.1. p.300.
- Ref.123. Gowing T. A voice from the ranks. p.65.
- Ref.124. Russell W.H. Russell's despatches from the Crimea. p.164.

Chapter 10. The report of the Hospital Commissioners and the establishment
of the Select Committee. Pages 110 - 122.

- Ref.125. Report upon the state of the hospitals of the British army in the Crimea and Scutari. (1855) pp.1-3.
- Ref.126. Ibid. p.5.
- Ref.127. Ibid. p.10.
- Ref.128. Ibid. p.13.
- Ref.129. Ibid. p.19.
- Ref.130. Ibid. pp.20-27.
- Ref.131. Ibid. pp.48-51.

References. Part 2. Chapters 10 and 11.

- Ref.132. Report upon the state of the hospitals of the British army in the Crimea and Scutari. (1855) pp.50-51.
- Ref.133. 2nd.Report from the Select Committee on the army before Sebastopol.(1855) p.517.
- Ref.134. The Times. 14 February 1855.
- Ref.135. Briggs A.(1972) Victorian people. p.64.
- Ref.136. Ibid. p.65.
- Ref.137. Ibid. p.69.
- Ref.138. Director General's precis of correspondence. Vol.1. p.358.
- Ref.139. Ibid. Vol.1. p.366.

Chapter 11. The events in Scutari and the development of the campaign in the Crimea; February - June 1855. Pages 122 - 133.

- Ref.140. Director General's precis of correspondence. Vol.1. p.363.
- Ref.141. Shepherd.J. (1966). The Civil Hospitals in the Crimea. 1855-56. Proc.Royal Soc.of Medicine. 59(3) 199-204.
- Ref.142. Director General's precis of correspondence. Vol.1. p.350.
- Ref.143. Woodham-Smith C. Florence Nightingale. p.195.
- Ref.144. Director General's precis of correspondence. Vol.1. p.351.
- Ref.145. In December 1854 Messrs.Brassey, Peto and Betts, civil engineers, agreed to supervise the construction of a railway from the sidings in Balaclava to the British camp on the heights above Sebastopol, a distance of about 7 miles. 250 platelayers and 130 artisans were sent to the Crimea together with all necessary materials. Work began in early January and progressed so rapidly that by April the line was being used to transport ammunition and supplies. The use of the railway permitted the accumulation of the vast quantities of ammunition needed for the subsequent bombardments. See Parl.Papers. Corresp. on subject of a railway from Balaclava to Sebastopol. (1854-55) (195) XXXII. p.547.

References. Part 2: Chapter 11.

- Ref.146. Reilly E.(1858) Artillery operations. p.84.
- Ref.147. Med.and Surg.Hist of the Army (1858) Vol.2. p.73.
- Ref.148. Ibid. p.74.
- Ref.149. Ibid..p.74-75.
- Ref.150. Ibid. p.79.
- Ref.151. Miss Nightingale had been appointed superintendent of the female nursing establishment in the English military general hospitals in Turkey. Dr.Hall interpreted her terms of reference to the letter and would not acknowledge her authority over nurses in the Crimea.
- Ref.152. Woodham-Smith C. Florence Nightingale pp.220-221.
- Ref.153. Director General's precis of correspondence. Vol.1 p.615.
- Ref.154. Ibid. Vol.1. p.754.
- Ref.155. Calthorpe S.J. (1857) Letters from Headquarters by an Officer on the Staff. (1857) Vol.2. pp.320-342.
- Ref.156. Saxe Weimar, Prince Edward of; RA/G33. P.E. to Duke of Cambridge. 19 June 1855.
- Ref.157. Hawley.R.B. (1970) The letters of Capt.R.B.Hawley, 89th. from the Crimea, December 1854 to August 1856. Soc.Army Historical Research. Special publication No.10.
- Ref.158. Ibid. p.59.
- Ref.159. The Times. 5 July 1855. p.9.
- Ref.160. Med.and Surg.Hist.of Army.(1858) Gen.Hosp.Returns. Vol.2. pp.481-484.
- Ref.161. Grieg D.M. Ass.Surg. Crimean letters. D.M.G. to Mrs.Grieg Senior. 20 June 1855.
- Ref.162. Med.and Surg.Hist.of Army (1858). Vol.2. pp.381-382.
- Ref.163. Hibbert C. The Destruction of Lord Raglan. p.292.
- Ref.164. Ibid. p.292.

References. Part 2. Chapters 11 and 12.

- Ref.165. Kinglake A. The Invasion of the Crimea. Vol.VIII. pp.281-282.
- Ref.166. Russell Sir Charles. Crimean letters. C.R.to George Russell. 29 June 1855.
- Ref.167. Hawley R.B. Crimean letters 28 June 1855.
- Ref.168. Russell W.H. Despatches from the Crimea. p.225.

Chapter 12.

Proceedings and conclusions of the Select Committee. Pages 134 - 145.

- Ref.169. 2nd.Report of the Select Committee on the Army before Sebastopol. (1855) p.392.
- Ref.170. Ibid. p.416. Q/A. 8278.
- Ref.171. Ibid. p.395. Q/A. 8031.
- Ref.172. Ibid. p.417. Q/A. 8282.
- Ref.173. Ibid. p.424. Q/A. 8404.
- Ref.174. Ibid. p.435. Q/A. 8558.
- Ref.175. Ibid. p.517. Q/A. 9624.
- Ref.176. 5th.Report of the Select Committee. Summary p.400-419.
- Ref.177. The Times. 21 June 1855 p.8.

Chapter 13. Events in the Crimea June - September 1855. Pages 145 - 157.

- Ref.178. The Pamure Papers (1908) Vol.1. p.257.
- Ref.179. Ibid. Vol.1. p.258.
- Ref.180. Med.and Surg.Hist.of Army. (1858) Vol.2. p.72.
- Ref.181. Ibid. Vol.2 p.81.
- Ref.182. Public Record Office. War Office papers. WO.129/179

References. Part 2. Chapter 13.

- Ref.183. P.R.O. War Office papers. WO.129/311
- Ref.184. The Times. 6 July 1855. p.7.
- Ref.185. Smith, Sir Andrew. Crimean letters. A.S. to Dr. Hall. 8 July 1855. ASL/3. Author's private papers.
- Ref.186. Hall MSS. FCO6/56.
- Ref.187. Ibid. FCO6/58.
- Ref.188. Panmure papers. Vol.1. pp.289-291.
- Ref.189. Ibid. Vol.1. pp.282-284.
- Ref.190. The allegations were investigated by a Court of Inquiry set up by General Simpson and found to be without substance. The following order was then issued by General Simpson on 3 August 1855.
- " A letter having appeared in the Times newspaper, dated Camp before Sebastopol, June 20th, containing charges of the gravest nature against medical officers of this army, a court of inquiry was directed to examine into the truth of the allegations set forth in it.
- The officers of this court, after the most minute and patient investigation into the whole of the circumstances connected with the treatment of the wounded on June 18, declare that this letter is calculated grossly to mislead the public, and to cast blame on those to whom praise is justly due. In this opinion the Commander of the Forces concurs, after a careful perusal of the evidence. It appears that Acting-Assistant Surgeon Bakewell is the author of this letter. He is therefore informed that his further services are dispensed with, and his name is struck off the strength of the army from this date."
- See Calthorpe S.G. Letters from Headquarters. Vol.2. pp.394-395.
- Ref.191. Director General's precis of correspondence. Vol.2. p.13.
- Ref.192. Panmure Papers. Vol.1. p.303.
- Ref.193. Ibid. p.308.
- Ref.194. Grieg D. Ass.Surg. Crimean letters. D.G. to Mrs.Grieg Senior. 27 July 1855
- Ref.195. Director General's precis of correspondence. Vol.2. p.26. 15,440/16W.

References. Part 2. Chapters 13 and 14.

- Ref.196. Director General's precis of correspondence . Vol.2.
p.62.
- Ref.197. Ibid. Vol.2. p.38. 15,440/10B.
- Ref.198. Ibid. Vol.2. p.42. 15,440/30.
- Ref.199. Panmure Papers. Vol.1. pp.307-308.
- Ref.200. Ibid. Vol.1. pp.309-310.
- Ref.201. Ibid. Vol.1. pp.320-323.
- Ref.202. Director General's precis of correspondence. Vol.2.
p.53.
- Ref.203. Ibid. Vol.2. p.75.
- Ref.204. Tsar Alexander had succeeded to the throne of Russia on
the death of his father, 2 March 1855.
- Ref.205. Seaton A. The Crimean War. A Russian Chronicle. p.194.
- Ref.206. Ibid. p.195.
- Ref.207. Ibid. p.196.
- Ref.208. Ibid. p.206.

Chapter 14. The capture of the Malakov; the assault on the Redan and the
evacuation of Sebastopol. Pages 157 - 163.

- Ref.209. Reilly W.E.N. Artillery operations. pp.179-180.
- Ref.210. Director General's precis of correspondence. Vol.2.
p.108.
- Ref.211. Ibid. Vol.2. p.558.
- Ref.212. Calthorpe S.G. Letters from Headquarters. Vol.2.
pp.410 - 411.
- Ref.213. Vulliamy C.E. Crimea. p.319.
- Ref.214. Reilly W.E.N. Artillery operations. p.191.

References. Part 2. Chapters 14 and 15.

- Ref.215. Clifford H.(1956) His letters and sketches from the Crimea. p.259.
- Ref.216. The Berkshire Chronicle. 10 November 1855.
- Ref.217. Seaton A. The Crimea. A Russian Chronicle. p.215.
- Ref.218. Russell W.H. Despatches from the Crimea. p.265.
- Ref.219. Director General's precis of correspondence. Vol.2. p.108.
- Ref.220. Farren, Gen. Sir Richard. Crimean letters. R.F. to Mrs Farren Senior. 9 September 1855.
- Ref.221. Med.and Surg.Hist.of Army.(1858) Vol.2. p.259.
- Ref.222. Ibid. Vol.2. p.43.

Chapter 15. Life in Sebastopol, October 1855-July 1856. The Treaty of
Paris and the evacuation of the Crimea. Pages 164 - 172.

- Ref.223. The first of the two civil hospitals in the East was established at Smyrna, on the west coast of Turkey, two days by fast steamer from Scutari. Taken over from the military on 14 March 1855 it was staffed by physicians and surgeons from various English hospitals and was under the superintendence of Dr.Meyer. But, after taking over 800 cases of fever in March, the flow of patients was soon reduced to a trickle and by June the staff were under-employed.
 A second civil hospital, designed by Isambard Brunel, was opened at Renkioi on the Dardanelles. Nearer to Scutari than Smyrna, it, too, was under-used and played little part in the care of the sick and wounded.
 See Shepherd J.(1966) Civil hospitals in the Crimean war. Proc.R.Soc.Med. 59(3) pp.199-204.
- Ref.224. Cantlie N.(1973) History of the Army Medical Department. Vol.2. p.179.
- Ref.225. Hayes P. (1975) The Nineteenth Century 1814-80. p.256.

References. Part 2. Chapter 15.

- Ref.226. Later estimates of the numbers killed and the numbers dying from disease were higher, the figures generally accepted being as follows.
Killed in action 30,000.
Died from wounds 42,000.
Died from disease 374,000
See Mulhall M. (1899) Dictionary of Statistics . p.587.
- Ref.227. Parliamentary Papers. Report on the organization of the Russian Medical Department, and the sanitary state of their Crimean Hospitals. (1857) 135 Sess.1.IX. 211.
- Ref.228. Medical Times and Gazette. 14 June 1856.
- Ref.229. Panmure papers. Vol.2. p.193.
- Ref.230. Ibid. Vol.2. p.239.
- Ref.231. Gowing T. A Voice from the Ranks p.144.
- Ref.232. Higginson G. (1916) 70 years of a Guardsman's Life. p.323.
- Ref.233. The Times. 14 July 1858.