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A STUDY OF THE MEDICAL SUPPORT TO THE
UNION AND CONFEDERATE ARMIES DURING
THE BATTLE OF CHICKAMAUGA:
LESSONS AND IMPLICATIONS FOR TODAY'S
US ARMY MEDICAL DEPARTMENT LEADERS

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

DAVID A. RUBENSTEIN, MAJ, USA
BS, Texas A&M University, 1977
MHA, Baylor University, 1989

Fort Leavenworth, Kansas
1990

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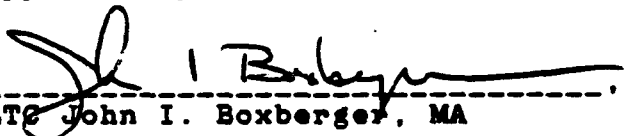
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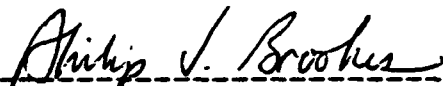
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ABSTRACT

A STUDY OF THE MEDICAL SUPPORT TO THE UNION AND CONFEDERATE ARMIES DURING THE BATTLE OF CHICKAMAUGA: LESSONS AND IMPLICATIONS FOR TODAY'S US ARMY MEDICAL DEPARTMENT LEADERS. by Major David A. Rubenstein, USA, 143 pages.

The Union's Campaign for Chattanooga, Tennessee, and its resulting Battle of Chickamauga, is a valuable study of marked contrasts. On the one hand, brilliant strategic planning and operational maneuver, in concert with skillful deception, allowed the Union's Army of the Cumberland to advance virtually unchallenged into the vital Southern city of Chattanooga on 9 September 1863. Following this drive into the gateway of Georgia and the Confederacy, however, was the Union defeat on the tactical battlefield just twelve miles to the southwest. Supporting each army was a medical support system grounded on the experiences and lessons of previous campaigns and battles. Both armies had medical leaders familiar with the medical organization, its recent accomplishments, and its capabilities. How these leaders applied the medical support doctrine of the era, within the scope of their duties, affected the lives of thousands of soldiers wounded on the Chickamauga battlefield.

The objective of this study is to examine the medical structures of both combatants, describe medical actions during the Chickamauga Campaign, from August to October 1863, and evaluate the effectiveness of each. As a result of this analysis appropriate implications are offered to the leadership of the Health Service Support system in the United States Army of 1990. Among the various implications discussed are the need for Health Service Support planning, tactical competence, staff cooperation, unity of command, and understanding of unique casualty care issues. The intended beneficiary of this historical analysis, and its suggested requirement of complete command support and dedicated medical training, is the very essence of an army: the soldier.

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My ability to understand the medical support of the Battle of Chickamauga was the direct result of the breadth and depth of material these professionals provided to me. The accuracy of the thesis is their success. Any errors, however, are mine alone.

A heartfelt note of appreciation must go to the Staff Ride Committee, Combat Studies Institute, Command and General Staff College, Fort Leavenworth, Kansas. The author of a history thesis rarely has the opportunity to actually visit the ground of which he is writing. I was privileged to have that opportunity through the College's "Staff Ride." For the opportunity to walk and understand the battlefield I am thankful; for the opportunity to share and appreciate the human element of battle, however, I will always be grateful.

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TABLE OF CONTENTS

	PAGE
APPROVAL PAGE	ii
ABSTRACT.	iii
ACKNOWLEDGMENTS	iv
TABLE OF CONTENTS	v
LIST OF MAPS.	vii
LIST OF FIGURES	viii
 CHAPTER	
I. INTRODUCTION.	1
 II. CONCEPTS OF MILITARY MEDICAL SUPPORT	
Civil War	8
Union Medical Support	9
Confederate Medical Support	12
The U.S. Army in 1990	15
 III. MEDICAL PLANNING FOR THE CHICKAMAUGA CAMPAIGN	
Army of the Cumberland Medical Organization	21
Army of Tennessee Medical Organization.	25
Union Medical Planning.	29
Confederate Medical Planning.	32
 IV. MEDICAL SUPPORT BEFORE THE BATTLE OF CHICKAMAUGA	
Union Actions Moving to Chickamauga	38
Confederate Actions Moving to Chickamauga	50
 V. MEDICAL SUPPORT AT THE BATTLE OF CHICKAMAUGA	
The Battle of Chickamauga	66
Union Medical Support at Chickamauga.	71
Confederate Medical Support at Chickamauga.	86
 VI. MEDICAL SUPPORT FOLLOWING THE BATTLE	
Union Actions Upon Entering Chattanooga	100
Confederate Actions Following the Battle.	107
 VII. IMPLICATIONS AND CONCLUSIONS.	
	116

APPENDIX 1

Surgeon's Reports: Listing and Cross Reference.	129
BIBLIOGRAPHY.	130
INITIAL DISTRIBUTION LIST	143

LIST OF MAPS

Map 1.	The Tullahoma Campaign, 23 June - 4 July, 1863, Movements and Area of Operations	4
Map 2.	General Hospitals Supporting the Army of the Cumberland, August 1863.	24
Map 3.	General Hospitals Supporting the Army of Tennessee, August 1863	27
Map 4.	Field Hospitals Supporting the Army of the Cumberland, September 1863	30
Map 5.	Union Movements Toward Chickamauga, September, 1863	41
Map 6.	Hospitals at McLemore's Cove, 11 September 1863	46
Map 7.	Confederate General Hospitals, 18 September 1863	53
Map 8.	Movement of Forces, 11-18 September 1863 . . .	67
Map 9.	Disposition of Forces, Dark, 18 September 1863	69
Map 10.	The Battlefield, 19-20 September 1863.	70
Map 11.	Crawfish Spring.	73
Map 12.	Union Field Hospitals, 19/20 September 1863. .	76
Map 13.	Selected Confederate Field Hospitals, 19/20 September 1863	89

LIST OF FIGURES

Figure 1.	Sequence of Events, Chickamauga Campaign . .	6
Figure 2.	Flow of the Wounded Under the Union Concept.	10
Figure 3.	Medical Staff Coordination, Confederate States Army.	14
Figure 4.	A Comparison of Medical Support, Civil War and the 1990's	17
Figure 5.	Ambulance Availability and Ratio of Support.	31
Figure 6.	A Surgeon's Observations of the Battle . . .	71
Figure 7.	Union Hospitals in Chattanooga, 21 September 1863	101

CHAPTER 1

INTRODUCTION

To a variety of lay and professional historians the American Civil War was fought in Virginia with only minor battles, of little consequence, fought in the west. This obviously is not correct. In fact, much is to be learned from the battles of the Western Armies. For today's student of military theory and practice the Union's Campaign for Chattanooga, Tennessee, and its resulting Battle of Chickamauga, is a valuable study of marked contrasts. On the one hand, brilliant strategic planning and operational maneuver, in concert with skillful deception, allowed the Union's Army of the Cumberland to advance virtually unchallenged into the vital Southern city of Chattanooga on 9 September 1863. Following this successful drive into the gateway of Georgia and the Confederacy, however, was the Union defeat on the tactical battlefield just twelve miles to the southwest.

In support of each army was an evolving medical support system grounded on the experiences and lessons of previous campaigns and battles. Both armies had medical leaders familiar with the medical organization, its recent accomplishments, and its capabilities. How these leaders applied the medical support doctrine of the era, within the

scope of their duties, affected the lives of thousands of soldiers wounded on the Chickamauga battlefield.

The objective of this study is to examine the medical structures of both combatants, describe medical actions during the Chickamauga Campaign, from August to October 1863, and evaluate the effectiveness of each. As a result of this analysis appropriate implications will be carried forward to the health service support system of the United States Army in 1990.

Primary Research Question

What can the present-day Army Medical Department leader learn from the medical support provided at the Battle of Chickamauga?

Secondary Questions

How was the medical support organized for each army?

How did the medical leadership of each army plan for the Chickamauga Campaign?

How was medical support provided to each army during the Battle of Chickamauga?

What were the actions of the medical personnel as each army consolidated in and around Chattanooga following the Battle of Chickamauga?

Assumption

Medical support lessons which were learned 126 years ago remain valid for study today. This assumption is more involved than merely addressing the professional development

of this work's readers. Specifically, it is valid for US Army health service support planners and concept developers, when planning and developing health service support for the US Army in 1990 and beyond, to consider lessons learned as a result of medical support provided in the Western Theater during the Civil War. In essence, the past provides a model for the future.

Definitions

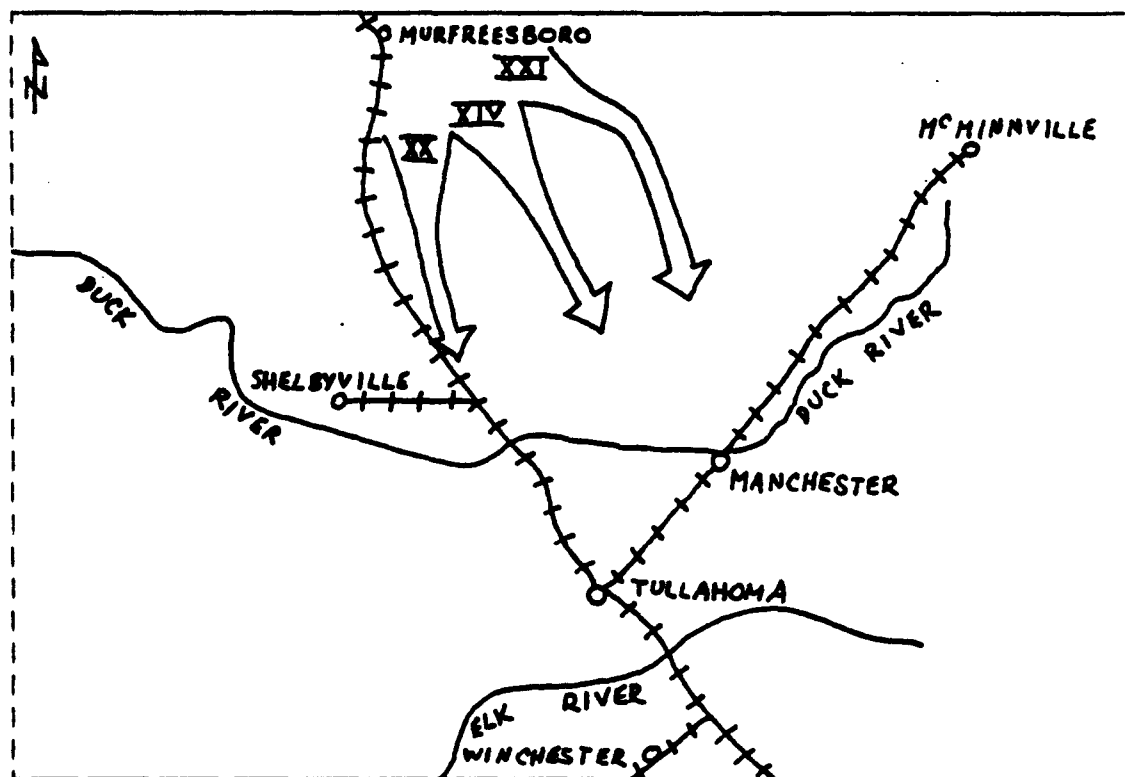
This study differentiates between medical support of the Civil War and health service support of the 1990's. Medical support during the Civil War will be described in Chapter Two as the service rendered by physicians, nurses, ambulance drivers, litter bearers, and ancillary personnel to the sick and wounded soldier. Functions of medical support included planning for the medical needs of an army in campaign, providing the personnel and supplies needed for that support effort, and executing the medical support plan. Executing the medical plan, as a sub-function of medical support, entailed establishing medical facilities, finding and treating medical casualties, and evacuating those patients, in turn, to each appropriate facility.

Health Service Support, as differentiated from medical support, and described in Chapter Two, encompasses a broader range of capabilities. The categories of health service support include evacuation, hospitalization, blood management, health service logistics, medical laboratory

services, veterinary services, preventive medicine services, dental services, and the associated command, control, and synchronization of each with the other and with the needs of the supported organization. ¹

Background

Since January 1863 the US War Department had been demanding a move on the southern city of Chattanooga. On 23 June, 1863, the Union Army of the Cumberland, under the command of Major General William S. Rosecrans, departed the area around Murfreesboro, Tennessee and began that much awaited campaign.



Map 1. The Tullahoma Campaign, 23 June - 4 July, 1863, Movements and Area of Operations.

In less than two weeks, the Confederate Army of Tennessee, commanded by Major General Braxton Bragg, was forced out of the fortified city of Tullahoma and south of the Tennessee River. ² The Tullahoma Campaign is still considered by many students and practitioners of military art as one of the benchmarks of strategic movement occurring throughout the course of military history. From the first week of July to the 15th of August, Rosecrans kept the Army in the vicinity of Tullahoma in order to replenish his supplies, await the ripening of the forage that grew between Tullahoma and Chattanooga, and, of greatest concern, repair the vital rail link between the supply base of Nashville and the crossing sites along the Tennessee River. He accomplished each of these tasks despite great pressure from Washington for the immediate continuation of operations. ³

While busy with the refitting of his Army, Rosecrans developed plans to move on and capture Chattanooga. The city was important as both the gateway to Georgia and a focal point of movement within the Confederacy. In fact, this rail hub was the key link to internal lines of communication between Richmond, Virginia to the east, the Gulf Coast to the south, and the Mississippi River to the west. General Bragg and his Army of Tennessee had been forced to move into and fortify Chattanooga by the movements of the Army of the Cumberland during the Tullahoma Campaign. As the move on Chattanooga began the city was protected by

defensive lines and cavalry screens established along the Tennessee River to the northeast and southwest. ⁴

This thesis examines the medical support provided to the soldiers of both armies as they entered the next series of operations: the campaign for the occupation and control of Chattanooga and its vital rail network.

16 Aug 63..	Army of the Cumberland begins its movements on Chattanooga.
29 Aug 63..	Army of the Cumberland begins crossings of the Tennessee River.
8 Sep 63..	Army of Tennessee begins its evacuation of Chattanooga.
9 Sep 63..	XXI Corps, Army of the Cumberland occupies Chattanooga.
19 Sep 63..	Battle of Chickamauga, first day.
20 Sep 63..	Battle of Chickamauga, second day.
21 Sep 63..	Army of the Cumberland begins to occupy Chattanooga entrenchments.

Fig. 1. Sequence of Events, Chickamauga Campaign.

ENDNOTES

CHAPTER 1

1. United States, Department of the Army, Field Manual 8-55, Planning for Health Service Support (Washington: GPO, 1965) 2-1.
2. United States, Congress, Joint, Report of the Joint Committee on the Conduct of the War 38th Cong. 2nd Sess., Vol 3. (Washington: GPO, 1865) 27-8; United States, Secretary of War, The War of Rebellion: A Compilation of the Official Records of the Union and Confederate Armies, 128 Vols. (Washington: GPO) 23/2: Report With Enclosures, Granger to Rosecrans, 9 Jun. 1863, 403-9. (Hereafter referred to as OR. Volume and part cited in Series I unless otherwise noted); Thomas Van Horne, History of the Army of the Cumberland (1875, 2 Vols. Wilmington, NC: Broadfoot, 1988) 1:302-9.
3. OR 23/2, Telegram, Lincoln to Rosecrans, 28 May 1863, 369; OR 23/2, Telegram, Stanton to Rosecrans, 7 Jul. 1863, 518; OR 23/2, Telegram, Halleck to Rosecrans, 24 Jul. 1863, 552, 554-6, 592, 597; United States, Congress, Report of the Joint Committee 28-9.
4. Additional discussion of movements for both Union and Confederate Armies can be found in Gilbert Kniffin, 'Manoeuvring Bragg Out of Tennessee,' Battles and Leaders of the Civil War, ed. Robert Johnson and Clarence Buel, 4 Vols. (New York: Century Co) 3:635-7.

CHAPTER 2

CONCEPT AND ORGANIZATION OF CIVIL WAR MEDICAL SUPPORT

The yellow identification flag shared by Union and Confederate medical organizations was indicative of the similarity that existed between the two systems. And well they should be similar. Both systems were developed and refined early in the war by Surgeons General who themselves were the result of shared backgrounds.

The Surgeon General of the Confederacy was Samuel Moore. It was his task to organize a medical service in support of the army fighting for the new Confederacy. Prior to resigning his commission in the United States Army, Moore had served as a military surgeon since completing medical school in 1835. During his 26 year career he had served at posts all along the western frontier and had participated in the Mexican War. ¹ Heading the Union Medical Department during the early, formative stages of the Civil War was William Hammond. To him fell the mission of turning a small, peacetime organization into a system that would meet the needs of a constantly expanding army. Hammond received a commission in the United States Army in 1849, and, as with Moore, served numerous assignments along the western frontier of the United States. ²

Unfortunately, the two medical systems also shared the low level of knowledge common to the state of medicine in the mid-1800's. The true causes of infection and many diseases were unknown. X-rays and other diagnostic tools were years in the future. Surgery was at best crude and at worst a filthy experiment. ³ In a similar vein, the soldier, whether Federal or Confederate, suffered many of the same horrors. From the time of injury to his subsequent furlough, return to duty, or death, the patient was often at the mercy of untrained and uncaring litter bearers, injury producing rides in ambulances, and inexperienced physicians anxious to gain practical knowledge and build reputations. ⁴ With time and experience, however, medical systems of the highest order were soon developed. These would take the wounded soldier from the battlefield, through hospitals in the field, to general hospitals in cities to the rear, and, finally, send him home or back to his organization.

UNION MEDICAL SUPPORT

At the beginning of the Civil War, the Union soldier was poorly served by a Medical Department that 'exhibited the evil consequences of imperfect knowledge of military administration.' ⁵ In fact, many of the Federal wounded of the War's first major battle at Bull Run were left on the field and had to walk or find other means to make it back to the medical facilities in Washington, DC. Most, however, were taken prisoner and sent to Richmond. ⁶ From this

disastrous beginning grew a medical system that exists, in much the same form, today.

The medical support system that grew from the disaster of Bull Run was based on the formation of medical organizations organic to the division. Specifically, an ambulance train and field hospital were developed for assignment to, and support of, each division. The resulting flow of the wounded is shown at Figure 1. 7

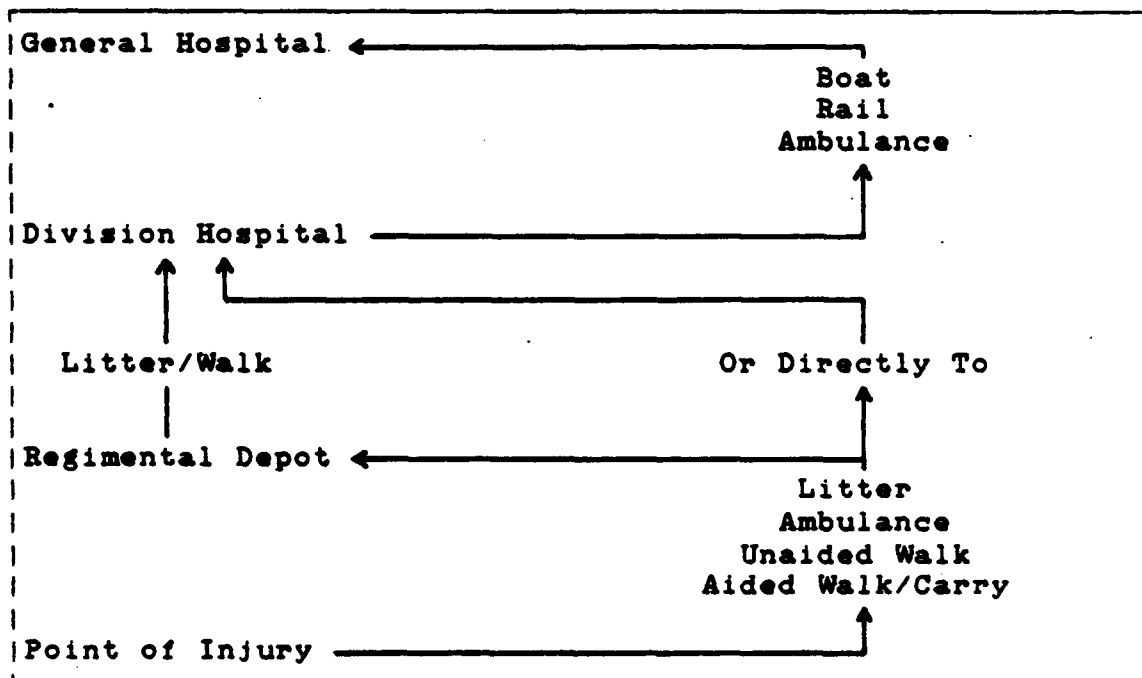


Fig. 2. Flow of the Wounded Under the Union Concept.

Surgeon Albert Hart of the 41st Ohio Volunteer Infantry described the manner in which Union combat medical support was delivered.

When a battle was expected, the general location of the hospital was made by the military

department or the corps surgeons. It was intended to be in the rear . . . and beyond the enemy's artillery fire . . . ; if possible a good supply of water must be at hand.

Three assistant surgeons and one surgeon were detailed to follow each brigade. They established a temporary depot just out of reach of the enemy's musketry fire. Here the ambulances stopped. The detailed nurses with stretchers followed immediately behind the line of battle. *

When a soldier was injured he walked or was carried to a point behind the regiment or brigade where regimental surgeons and their assistants were located. Here medical personnel stopped the bleeding, applied temporary bandages, and splinted fractures. They did not, however, perform any major operations, such as amputations, unless immediately necessary to save the soldier's life. Casualties needing additional care were then loaded onto the regiment's wagon ambulance and evacuated to the division hospital. At this point in the medical system preceding measures were refined, major surgical procedures were conducted or completed, and the soldier was placed on a cot. The casualty stayed here, if he survived, until he was returned to his regiment for duty or evacuated to a general hospital. *

Such was the concept of Federal combat medical support. In practice, however, such variables as mobile

combat operations (especially pursuit or retreat), command and staff support or disinterest, and surgeon skill or inexperience had a direct impact on the accomplishment of the medical mission. Some personal accounts clearly show that the system often worked as planned:

. . . a Shell burst over our heads & wounded me in the foot . . . , I went to the rear [and] . . . met hospital Steward he put me on his horse & took me out of reach of the Rebel Shells, he took me to the Ambulance . . . then Sent me to the Field Hospital where I got my foot dressed. ¹⁰

Other accounts, of course, show that the medical support system did not always operate as intended. In the story of his hospitalization following the Battle of Stones River, one Union soldier "thought with pity" knowing that "numerous wounded were still on the field." ¹¹ In general, however, by the time of the Chickamauga Campaign the Union medical organization had been thoroughly tested and refined and was capable of providing quality Civil War era medical support to the wounded soldier. ¹²

CONFEDERATE MEDICAL SUPPORT

Only few official records of the Medical Department of the Confederate States exist today. ¹³ What we learn from the limited official documents and the more plentiful personal accounts is that the Confederate medical support system was very similar to that in the Federal armies. ¹⁴

This should not be unexpected as 24 medical corps officers of the Regular Army of the United States resigned their commissions and joined the fledgling medical department of the Confederacy. Chief among these Southern medical officers was Dr. Samuel Moore who served as Surgeon General throughout the war. ¹⁵

The Confederate medical system differed in the manner of execution rather than in the system's general concept. Assistant surgeons located themselves with the troops at battalion and regimental level, established aid stations, and provided first aid to the wounded. Once these temporary measures were taken, the wounded were sent to the brigade infirmary (hospital) established just out of rifle range. The primary battlefield difference then, between North and South, was that the Confederates often established their first hospitals at brigade level. Occasionally, though, these brigade infirmaries would band together and form a division hospital similar to the Federal concept. ¹⁶

A second difference is shown at Figure 3. The surgeon responsible for the medical organization and personnel at the tactical level did not have command authority over the general hospitals to which the badly wounded were evacuated. On the other hand, the Director of General Hospitals had no control over the transportation of wounded to his hospitals. Instead, the army's medical director was responsible for planning evacuation. ¹⁷ The

best the soldier could hope for was that these doctors would work out the details so as to minimize delays in medical treatment. To this end, Confederate Surgeon C.H. Tebault claimed that "the able Medical Director in the field was always in instant official communication with the Medical Director of Hospitals. Thus there obtained no loss of time or confusion in knowing where to send the . . . wounded." 10

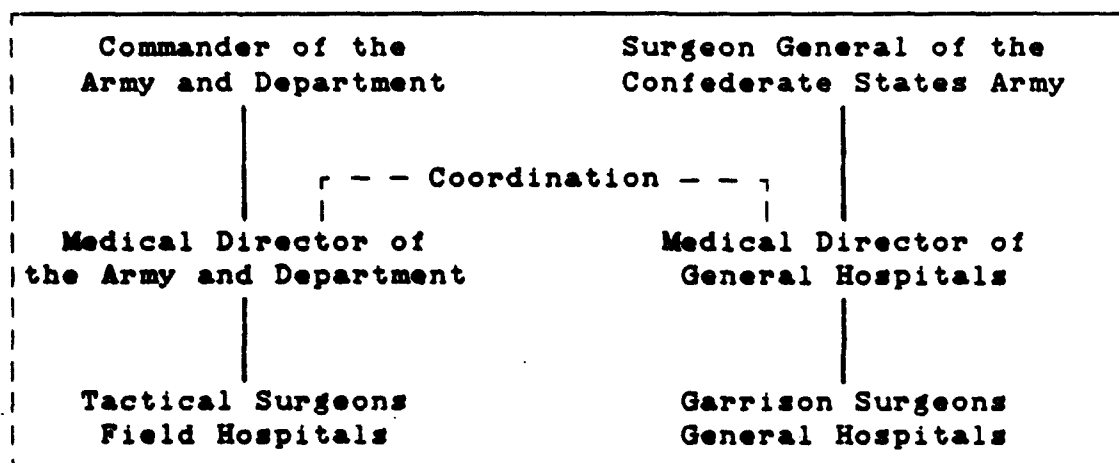


Fig. 3. Medical Staff Coordination, Confederate States Army.

A third difference was the South's development of an organization known as the Wayside or Way Hospitals. These were established by an Act of Congress on May 1, 1863. 10 Their purpose was to provide medical care, nourishment, comradeship, and a comfortable resting place to the wounded soldier being evacuated by rail. "Soldiers suddenly taken ill, or convalescents going home on furlough, having overestimated their strength, were nourished and treated at these institutions." 20

Though minor differences did exist, both systems had the same goal, care to the casualties of battle. In both camps the wounded soldier was given a rapid examination by a battlefield physician and provided immediate first aid. He was then evacuated to a field hospital, at division for the North, at brigade for the South, for major surgery and other treatment. Once well enough, the soldier was evacuated, usually by train, to a general hospital located in a city to the rear.

THE U.S. ARMY IN 1990

Health service support to the modern battlefield is highlighted by staff specialization built on the experiences of the past. Planners and providers of health service care, supply, evacuation, and sanitation are all under the eye of a single staff surgeon. As a result, the current medical department enjoys a unity of command little seen in the Civil War. The explosion in knowledge and technology has done much to advance the modern day provision of medicine. No longer do we expect to see soldiers lying untended on the battlefield days after the fight, or suffering the same fate as their Civil War brothers with the same type of injury.²¹ And yet, as much as things change, they remain the same.

The wounded soldier of the 1990's can expect, very nearly, the same conceptual method of care as that of the 1860's. The wounded are still treated first by a medical professional immediately behind the front lines (battalion

aid station). After stabilization the patient is still moved on an ambulance, or other handy conveyance, to a battlefield "hospital" (brigade level clearing station) where greater medical detail is provided. From this level of care, the casualty is still evacuated to hospitals of ever increasing capabilities, farther to the rear, until returned to duty or returned home. ²²

What has changed over the years is the manner in which medical care is rendered. Tactical evacuation by the wagon ambulance has given way to the helicopter while strategic movements by railroad car have been replaced by transport aircraft. Other benefits of technology mean that an amputation is no longer considered to be the expected treatment of a bullet-induced fracture and infections are preventable and treatable.

SUMMARY

The medical support systems discussed above were designed to provide quality care within the capabilities of era medical knowledge. The reader should keep in mind that the medical care provided to the Civil War surgeon should be evaluated within the scope of that War's understanding of medicine. A simple comparison of the two systems, separated by 126 years, is shown on the next page at Figure 4.

Description	Civil War	1990's
First Care	Bn/Rgt Depot	Bn Aid Station
Provided By	Asst Surgeon	Physician's Assistant
Moved By	Wagon Ambulance	Ground/Air Ambulance
Next Care	Bde/Div Hosp	Bde Clearing Station
Provided By	Surgeons	Physicians
Moved By	Ambulance/Rail	Helicopter/Airplane
Next Care	General Hospital	Corps Hospital

Fig. 4. A Comparison of Medical Support, Civil War-1990's.

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CHAPTER 3

MEDICAL PLANNING FOR THE CHICKAMAUGA CAMPAIGN

ARMY OF THE CUMBERLAND MEDICAL ORGANIZATION

The framework of Union medical support served only as a conceptual foundation for the evolution of a system specific to an army. In fact, until an act of Congress in 1864, the method of organizing an army's medical system to provide care and evacuation was dependent upon the skill and interest of individual commanders and surgeons. To aid them, however, a model organization was available in the form of a system, developed by Medical Director Jonathan Letterman, being used in the Army of the Potomac.

Briefly, Letterman's year-old, yet proven, system called for the consolidation of hospitals at the division level, decentralization of supply to regimental level, and medical unity of command over ambulances at all levels.¹ In the Western Theater this system had been adopted by Grant's Army of the Tennessee by 18 April, 1863.² It was not, however, the system practiced by the medical staff of the Army of the Cumberland.

In fact, the medical department of the Army of the Cumberland was in a state of transition as the Chickamauga Campaign began. The Medical Director was Surgeon Glover

Perin, a veteran regular army surgeon with 16 years of military-medical service. Perin joined the Army at Murfreesboro on 21 February 1863 and soon found fault with the existing ambulance structure. ³ In fact, "the Medical Department was found in a deplorable condition. Complaints came from all sides" ⁴

Within two weeks Perin had drafted an interim modification to the ambulance structure, which Rosecrans authorized for release as General Order 41. This called for one ambulance to be positioned with each regiment and ten ambulances per brigade were to be located with the corps, division, or brigade, depending on need. The chief quartermaster of each corps supervised the care and use of the ambulances, while an ambulance master controlled each ten vehicles. At all times, however, the quartermaster and ambulance master were to respond to the medical director of the corps, division, or brigade. ⁵ Perin clearly saw this as a temporary, and not completely satisfactory, plan.

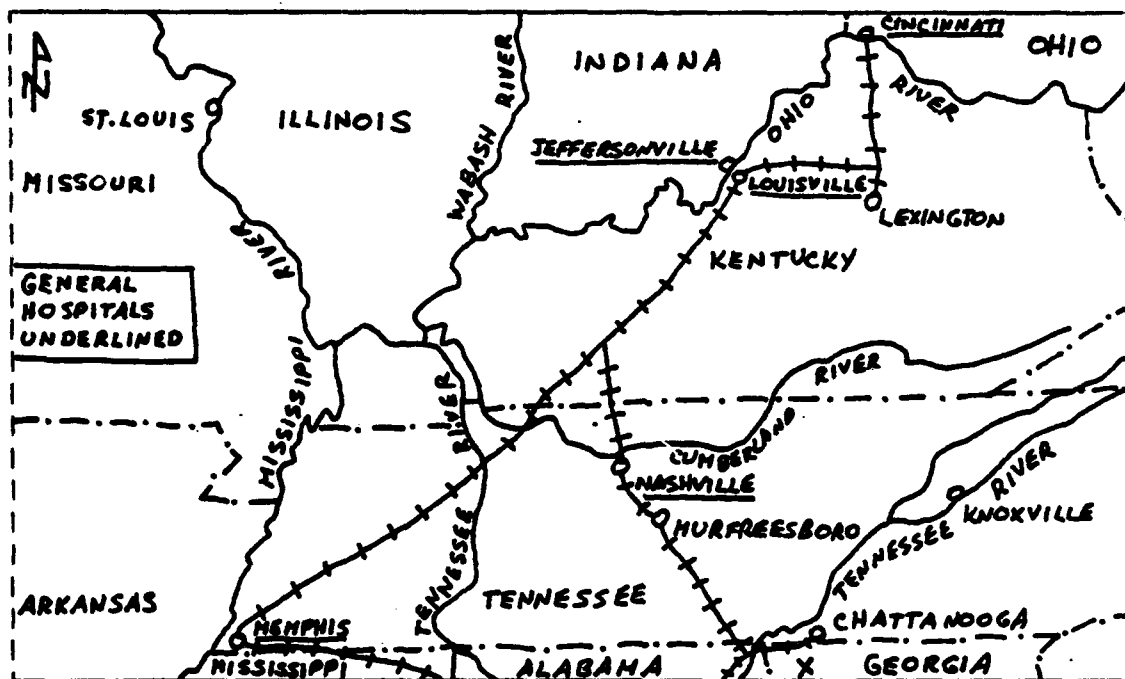
To develop a more complete medical support system, Perin recommended the adoption of an Army medical structure founded on the Letterman System. ⁶ Since this was not accomplished until 2 January 1864, the Army found itself entering the Chickamauga Campaign transitioning between old and new concepts. ⁷ For example, XIV Corps had given control of the ambulances to the medical directors while XXI Corps still relied upon enlisted ambulance masters. ⁸

On the other hand, the basic hospital organization of the Army was not in flux. Medical plans called for regimental or brigade aid depots to be established to the rear of the fighting troops. Supporting these depots, and further to the rear, were the division hospitals. This organization was standard across the Army. ⁹ The Cavalry Corps, which had no assigned hospitals, was the only exception. ¹⁰

Supporting these division hospitals were a number of general hospitals. The closest were in Nashville, which accounted for 3000 beds. Hospitals in Louisville, Memphis, Cincinnati, and other cities in Kentucky and Illinois brought the total available beds to nearly 12,000. Field hospitals at Stevenson and Bridgeport, Alabama, while not technically general hospitals, served as a source of beds between the battlefield and the hospitals to the north. ¹¹

Linking the field hospital at Bridgeport to the general hospitals at Nashville was a new five-car hospital train. Two of the cars were fitted for the transfer of up to sixty litter patients. Initially, these cars were modified passenger cars but, by mid-September 1863, two of the cars were specifically designed and built to carry medical patients. Two other cars were unmodified passenger cars used to evacuate ambulatory, or walking, patients. Supporting all four was a box car modified for kitchen use. Also new to the Army of the Cumberland was the reservation

of this ambulance train for the sole use of the sick and wounded. The system, however, did not eliminate the need for, or use of, unmodified box cars for evacuation. ¹²



Map 2. General Hospitals Supporting the Army of the Cumberland, August 1863.

Fortunately for Perin and the Army, Rosecrans was greatly interested in the health, welfare, and medical needs of his soldiers. This pro-medical attitude ranged from his intolerance for poor sanitation habits to his insistence on evaluating each of the Army's physicians for medical competency. ¹³ Empirical evidence of Rosecrans's attitude may be found in the disease rates for the Army. The rate of disease per 1000 soldiers in 1863, under Rosecrans, fell 9.6 percent from the rate reported in 1862, under Major General

Don Carlos Buell. ¹⁴ Anecdotal evidence of this medical interest is seen in Rosecrans's removal of Surgeon Eben Swift, Perin's predecessor, shortly after the January 1863 Battle of Stones River. The stated cause for the relief action was Swift's failure to develop and maintain an adequate medical system. ¹⁵

In summary, the Army of the Cumberland had a medical system that had matured as a result of previous battles and campaigns. Both the Army commander and medical director were greatly concerned with the quality of care rendered. As a result, both stimulated the refinement of the medical structure by seeking and incorporating the best in available medical doctrine and technology.

ARMY OF TENNESSEE MEDICAL ORGANIZATION

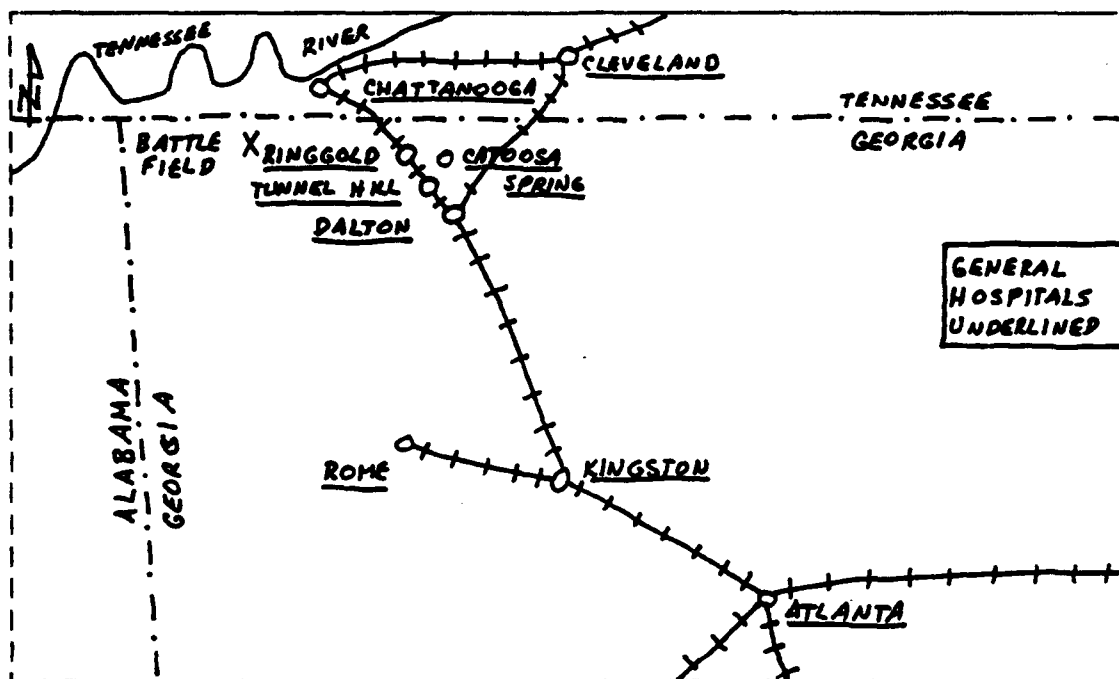
Little is officially known of the arrangements for medical support of the Army of Tennessee beyond the general concepts discussed in Chapter Two. By piecing together various official and personal accounts, however, the following picture of medical care emerges.

Soldiers in the Army of Tennessee were cared for by up to two medical officers supporting each regiment or battalion. Claudius Wilson's Brigade of William Walker's Division, with five regiments/battalions, for example, lists four surgeons and six assistant surgeons on the rolls for the month of September, 1863. ¹⁶ The wounded were treated by medical officers following "directly behind the

troops' before being placed on ambulances. ¹⁷ After receiving initial medical care the soldier moved by ambulance to a brigade hospital in the rear. ¹⁸ To evacuate the wounded from the battlefield, the Army was authorized one ambulance per regiment, brigade, and division. Research does not indicate, however, if these numbers were rigidly adhered to in the Army. ¹⁹ Medical director Flewellen did report in early 1863, and again in early 1864, that the Army of Tennessee was sorely lacking in sufficient ambulances. ²⁰ As with their Union counterparts, the Confederate cavalry of Bragg's Army carried their wounded on horseback as they had 'no stretchers and an ambulance was unknown.' ²¹

As soon as the soldier was healthy enough to travel he was sent to the general hospitals supporting the Army. In the summer of 1863 the Army was supported by 31 general hospitals, with a capacity of about 7500 beds, located in Chattanooga, Rome, Atlanta, and other cities throughout Tennessee and Georgia. ²²

The concept behind the Army of Tennessee's general hospitals is more important than their precise location. For, unlike general hospitals in support of the Union Army, or elsewhere in the Confederacy, the Army of Tennessee's general hospitals were designed to be mobile organizations. The hospitals, their equipment, and the patients were able to move around the Department of Tennessee as the fortunes of war dictated. ²³



Map 3. General Hospitals Supporting the Army of Tennessee, August 1863.

Three men were behind the structure of medical support for the Army of Tennessee. First among these was General Braxton Bragg, Commander of the Army. Despite his earned reputation as a strict disciplinarian, Bragg was very concerned with his men's welfare and maintained a great interest in his command's sick and wounded. When evacuating Murfreesboro he is reported to have turned to his medical director with 'tears trickling down his cheeks' and asked 'what to do about our poor wounded men we will have to leave here?'²⁴ Bragg's concern for the wounded was also evident by his actions. He habitually stopped to inspect hospitals that happened to be near his travels. During these visits his attention was equally drawn to patients, required

reports, prescription books and registers, as well as the kitchen and bedding. ²⁵

Bragg's medical director, responsible for tactical medical assets was Surgeon Edward Flewellen. Flewellen had served the first year of the war as a regimental surgeon to the 5th Regiment, Georgia Volunteers before being promoted as the Assistant Medical Director of the Army. On 23 December 1862, on the eve of the Battle of Stones River, he became the Army's Medical Director. ²⁶

The real strength of the Army's medical system, however, may well have been Surgeon Samuel Stout, Medical Director of Hospitals. ²⁷ Stout, initially a regimental surgeon and a general hospital surgeon, took charge of the general hospitals in Chattanooga in March 1862. General Bragg, as was his habit, conducted an unannounced inspection of the hospitals in July. He was so impressed with Stout's organizational and supervisory skills that he immediately placed all of the Army's general hospitals under Stout and gave him a free hand as to all elements of hospital activity and organization. Initially, Stout was required to report only to the Army Medical Director. By February, 1863, however, Surgeon General Moore adopted the position of medical director of general hospitals for use throughout the Confederacy. As a result, Stout's chain of command was directly to Moore. ²⁸

Stout's primary contribution was his method of organizing and moving general hospitals to support the Army. In his words: 'When the exigencies of the services demanded the evacuation of a . . . post, all the hospitals there were removed with their organizations preserved, and their hospital property . . . going with them.' ²⁰ To accomplish this objective Stout developed the hospitals so that they could quickly be disestablished and moved from city to city based on the Army's movements. For the medical staff this broadened the range of possibilities for providing care. For the wounded soldiers of an army in retreat this meant that a general hospital would be readily available to meet the needs of their injuries.

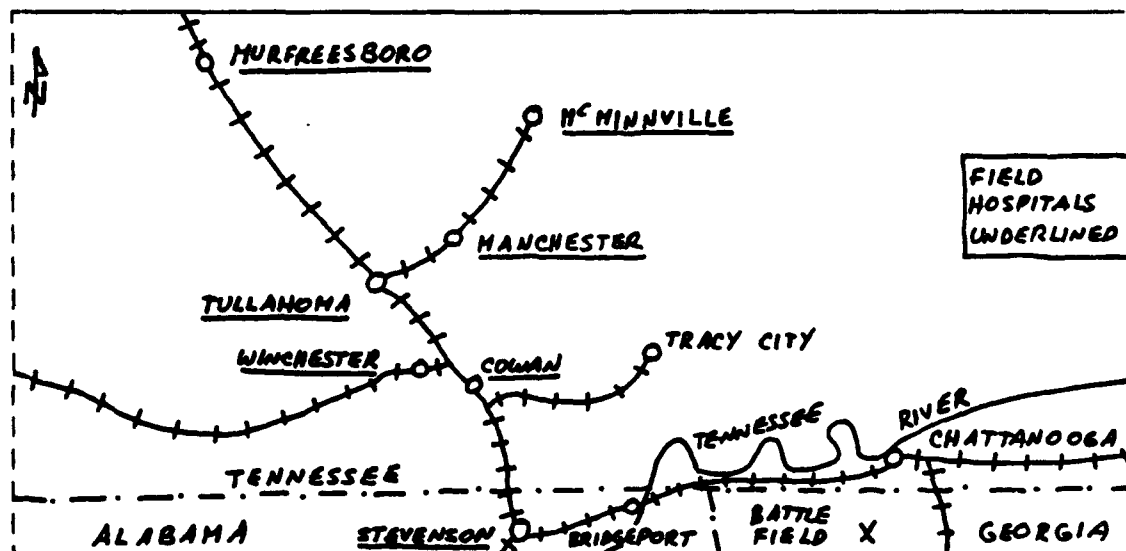
And so had the specific medical systems of both armies evolved prior to the Chickamauga Campaign.

UNION MEDICAL PLANNING

The Army of the Cumberland departed from the area around Tullahoma on 16 August, 1863. In preparation, Perin had taken actions to meet the Army's medical needs for both the operational move and in event of a general engagement with Bragg. To Perin, these needs fell into three broad categories: hospitalization, evacuation, and supply. Following the Tullahoma Campaign, field hospitals were established at Murfreesboro, Tullahoma, Manchester, McMinnville, and Winchester. In anticipation of the Army's move, Perin had half of the 2000-bed Murfreesboro hospital

sent to Cowan, midway between the supply depots at Stevenson and Tracy City. ³⁰

On 14 August, a message was sent from Rosecrans's headquarters to each corps commander querying them as to their readiness to move forward. Along with that question was the notice to provide 'for your sick, and see that they are supplied with rations, hospital stores, &c.' In response, XIV Corps sent their sick to Cowan and XXI Corps made use of hospitals in Manchester, McMinnville, and Nashville. ³¹ This would allow each of the corps to move unencumbered with ineffective soldiers and to bring their organic medical equipment on the march over the Cumberland Mountains. Providing for the sick also included guarding them. Therefore, Army orders tasked XIV Corps to detail guards for the forward-most hospital at Cowan. ³²



Map 4. Field Hospitals Supporting the Army of the Cumberland, September 1863.

Perin did not enjoy the same degree of control over the ambulances within the Army as he did with the hospitals. His changes to the Army's ambulance structure had not been completely implemented, thus the quartermaster still had control of most ambulances. The Army did, however, have a sufficient number of wagon ambulances equitably divided among the three corps. Each regiment had one ambulance permanently attached. XIV and XXI Corps also reported 30 additional ambulances in support of each division. XX Corps, however, had only 22 extra ambulances available for each division. ³³

Corps	Present for Duty	Ambulances	Ratio
XIV	22,758	183	124:1
XX	13,372	105	127:1
XXI	14,190	128	110:1
<u>Army Total</u>	<u>50,320</u>	<u>416</u>	<u>120:1</u>

Fig. 5. Ambulance Availability and Ratio of Support.

Supply was Perin's third category of concern. Knowing that a lengthy campaign was expected, each regiment received three months of medical supplies. Additionally, Perin established a reserve supply of medical goods and hospital tents for each corps. ³⁴ The use of a central corps supply was standard for the Army of the Cumberland. These reserve stocks typically consisted of medicines, hospital stores, dressings, and 250 hospital tents. The

Army's medical staff intended that regiments would use the supplies on hand while the corps reserve supplies were kept intact for field emergencies or a general engagement. In fact, Perin went to great lengths to ensure that the corps supplies would be left untouched. For example, day-to-day supplies for the intermediate hospitals, such as Cowan, were shipped from Nashville and Murfreesboro. 30

As a result of the preceding arrangements, and within the limitations of a developing structure, the Army of the Cumberland had developed and disseminated an adequate medical plan to support the move on Chattanooga. Perin had planned field hospitals along the route, scheduled regular rail evacuation to Nashville, distributed ambulances among subordinate units, and provided medical supplies. The medical staff, from regiment to army, was well prepared for the upcoming campaign.

CONFEDERATE MEDICAL PLANNING

Not knowing the Union Army's specific plans, the two medical directors of the Army of Tennessee had no reason to plan the provision of medical support with a specific start date in mind. This is not to say, however, that medical precautions were being ignored during the period preceding 16 August, 1863.

In the Army's rush to evacuate Tullahoma the wagon trains, which included the Army's wagon ambulances, were given a four-days [head]start along the awful roads to

Chattanooga." ³⁶ Contributing to the poor state of the roads was the topography of south-central Tennessee, which required the Army's trains to cross, in turn, Elk River, Cumberland Mountain and, Walden's Ridge (Map 1, page 4). Additionally, medical director Flewellen was forced to abandon a number of medical tents, and possibly other medical equipment, at the Army's encampments in and around Tullahoma. ³⁷

Flewellen, then, had two immediate missions after arriving in Chattanooga. First, he had to ensure the repair or replacement of any ambulances damaged or lost during the withdrawal into Chattanooga. In this regard, Flewellen reported a shortage of ambulances, although the extent of loss is not completely known. ³⁸ Simultaneously, the medical director was faced with replacing lost tentage and equipment. Restocking of medical supplies, however, was probably not a significant problem as the evacuation of central Tennessee was done out of contact with the enemy and resulted in few casualties.

Samuel Stout, the Medical Director of General Hospitals, was also busy during this period. Knowing that Chattanooga was not defensible, he sought Bragg's guidance relative to the hospitals. Bragg reportedly directed Stout to "begin moving the patients and hospital property as quietly as possible, and, to avoid exciting suspicion, to continue the work on the new hospital building until the

near approach of the enemy." 30 To accomplish this, Stout arranged for the Chattanooga patients to be moved to the Army's other general hospitals, which had 7500 beds in 31 facilities spread over nine communities in two states. When the Union Army of the Cumberland began its march from Tullahoma, however, the five Chattanooga hospitals had yet to be moved. 40 (Map 3, page 27).

Despite the lack of details about Flewellen's planning process, the medical arrangements for the Army of Tennessee appear to be similar to Confederate medical support concepts in general. The inadequate number of ambulances available were in need of repair but medical supplies were not a problem, since there had been no heavy combat engagements subsequent to Murfreesboro, over seven months previous. Also, medical care and hospitalization was readily available in and around the Chattanooga encampments.

SUMMARY

Two well-rested and eager antagonists were about to begin an odyssey that would end with victory or defeat, made or broken reputations, and the wounding of over thirty-five thousand soldiers. In anticipation of the many requirements for the campaign, the medical staffs of both armies did make appropriate arrangements, within the scope of their assets and capabilities. The next stage, the Federal's move on Chattanooga soon required the activation of those plans.

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7. OR 32/2: General Order 2, 2 Jan. 1864, 16-8; Perin's detractors fail to mention his subsequent actions to improve the ambulance organization.
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9. MSH 1/App: 267, 269, 274, 278; My interpretation is at odds with the writings of both Louis Duncan, "The Medical Department of the United States in the Civil War. The Great Battle of the West, Chickamauga," The Military Surgeon 31 (1912): 359; Gillett, Army 220.
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CHAPTER 4

MEDICAL SUPPORT BEFORE THE BATTLE OF CHICKAMAUGA

UNION ACTIONS MOVING TO CHICKAMAUGA

The Union Army's move on Chattanooga began on the morning of 16 August and, almost immediately, the medical department was called on to provide care to the soldiers. The health of the command was good and morale of the soldiers high, but as the march proceeded the combination of central Tennessee's mountainous terrain and hot, dry weather started to take its toll on the soldiers. ¹ A soldier of the 36th Illinois wrote that his regiment had started their march at 2:00 p.m. on the 17th and, by nightfall, had moved a distance of only six miles. Despite the seemingly short move, however, all the ambulances of the Third Division, XX Corps, were full of "men who have given out from the effects of the heat." ² A similar situation was reported by a corporal in the First Division of the same corps, who also noted that the temperature was near 100 degrees. ³

Most of these casualties would have ridden in the wagon ambulances and followed behind the regiments or to the division's rear as part of the trains. At the end of the day's march, the surgeon would then be able to reexamine the soldier and evaluate his condition. Most heat casualties were able to continue the march the next day but some would

have required additional care. Surgeons had the choice of several options for these seriously ill soldiers.

One option was to establish a temporary regimental hospital at the bivouac site. The 78th Pennsylvania chose this option when a lack of ambulances prevented timely evacuation of the sick. ⁴ A similar possibility, and one used by Stanley's Cavalry Corps and the 21st Wisconsin, was to leave the sick behind at a private home under the care of the regimental surgeon or, if necessary, the homeowner. ⁵ The drawback for either of these options was the resulting fragmentation of the division's medical care.

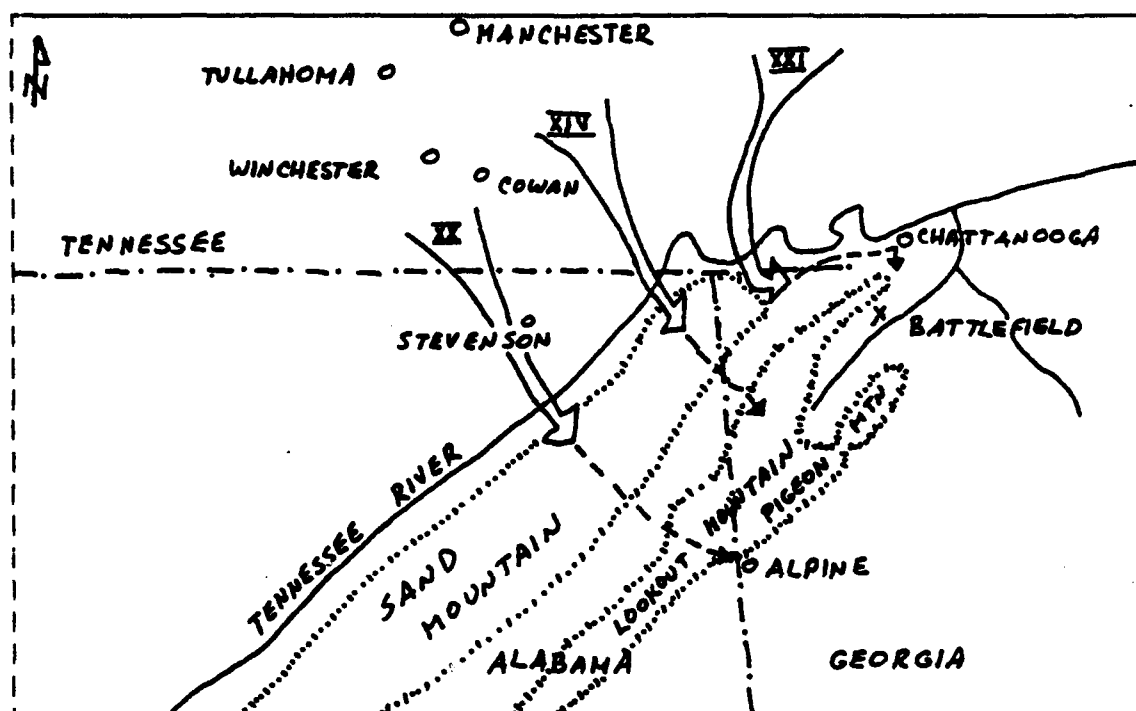
The effect of separate medical facilities along the route of march was detrimental to the division. First, the very issue of regimental hospitals, in tents or in private homes, was counter to the demonstrated benefit of division level hospitalization. Second, and related to this centralization of care, was that several small hospital sites did not allow for proper physician-patient ratios. One site, for example, may have a surgeon and five patients while another hospital had an assistant surgeon and twenty-five patients. Finally, any single hospital required some degree of non-medical support such as transportation, guards, and rations. Establishing a temporary regimental hospital, therefore, although needed on occasion, was not the best way to care for the sick who could not continue the march.

A second option was to carry the non-marching sick with the regiment. This would have resulted in the soldier quickly returning to his unit when fit, but carrying the wounded also required finding and using additional wagons or ambulances. Before the 41st Ohio could use this technique it was forced to request two additional ambulances. * One must also consider the effect this sick train might have had on the morale of the remaining troops.

The third option available to Perin was to establish field hospitals for the central reception of the Army's sick during the march on Chattanooga. The benefit of this option was that the previously discussed disadvantages were converted into advantages. Additionally, tents, equipment, and other supplies for these facilities were available from depots at Nashville or Murfreesboro. This, in turn, left the corps and regimental medical stocks intact.

Once the Army moved out of its Tullahoma area camps, Perin transferred the field hospital at Murfreesboro south to Stevenson. However, unlike the hospital situation at previous encampments, the buildings at Stevenson were not acceptable for medical use and it was necessary to construct a hospital. The chosen site was open, elevated, and near a source of water. The 1st Wisconsin, XIV Corps, was assigned the task of building the facility. 7 By the end of August this field hospital, with a capacity of 1800 beds, was completed and regiments were able to evacuate their sick to

Stevenson. • To take advantage of the rail line running the ten miles east from Stevenson to the Tennessee River, a smaller tent hospital was built at Bridgeport. •



Map 5. Union Movements Toward Chickamauga, September 1863.

The primary drawback to the field hospital concept was in transporting the sick soldier from his regiment to the hospital. The roads throughout this region of Tennessee were narrow and, because to the southerly movement of the Army, largely one way. Adding hospital-bound ambulances to the crowded roads only worsened the problem. To overcome this obstacle, medical directors of the various units took liberties to move sick and injured soldiers on empty supply wagons returning to the supply depot at Stevenson. 10

This technique, also known as backhaul evacuation, was almost always rough on the patient as unmodified supply wagons provided little comfort for the wounded. They did, however, ensure that regimental and division ambulances were available in the event of an engagement with the enemy. Backhaul evacuation was also used to support units that did not have ambulances. Colonel Lewis Watkins, commanding a cavalry brigade with no ambulances, used wagons to move sick soldiers. Fortunately, he appreciated the rough treatment of the wagons on the soldiers and reported the sick 'will not bear transportation further. Send train to-night if possible.' ¹¹

The train system was also used to further evacuate patients from the Stevenson hospital to general hospitals at Nashville and elsewhere, the Murfreesboro hospital having been closed in favor of the hospitals at Bridgeport and Stevenson. The preferred method of patient evacuation by rail lines was on the hospital cars provided for that purpose. Normally, the cars were part of a larger train of passenger and freight cars that ran regularly between front and rear depots. When hospital cars were not available, or if additional assistance was required, a separate train of un-converted boxcars would be pressed into service. ¹²

ACTIONS SOUTH OF THE RIVER

The Army of the Cumberland crossed the Tennessee River between 29 August and 4 September. The crossing was

uneventful for the medical department as no mention was made in after action reports of medical specific equipment or personnel losses. Also, the Army remained in good health, although an increase of malarial type sickness was noted in units along the river's bottom lands. ¹³

Perin's medical structure remained, for the most part, unchanged. The cavalry was still without a field hospital, although ambulances were now on hand. Movement orders required each regiment of XXI Corps, as in XIV Corps, to travel with an ambulance while its hospital supply wagon traveled with the trains behind the troops. ¹⁴ XX Corps, however, issued orders that would have altered its normal amount of medical supply.

The initial movement order for XX Corps reduced the number of supply wagons to be allowed on the march south of the river and described how the remaining wagons were to be used once across. Among other restraints, the order allowed a regiment to carry not more than 500 pounds of medical supplies. Also, no other wagons were available to carry additional hospital stores. ¹⁵ No mention was made as to how hospital tents, weighing 217 pounds apiece, were to be carried. This order greatly reduced the normal allotment of three months supply of medical needs at regimental level and additional stores in the corps trains. ¹⁶

Whether the decision to cut back on medical items was made for a purpose or out of ignorance is not known.

The records indicate, however, that Jabez Perkins, the XX Corps surgeon, did not participate in the planning that resulted in the cutback. In fact, upon discovering the reduction, he brought a complaint to the chain of command and succeeded in having the order corrected. The order was modified and allowed for the inclusion of all "regular hospital wagons . . . with their contents unreduced, and also one additional wagon to each division" 17

Perkins was not the only surgeon excluded from his organization's planning. Albert Hart, regimental surgeon for the 41st Ohio, XXI Corps, complained that even the route of march was kept from him. "It is the same on every march and [the brigade surgeon] and even the Director of Division know not more than the rest of us." 18

Once to the south of the Tennessee River there was little activity for the medical department of the Army. Those few soldiers who did become sick stayed, for the most part, with their regiments although the seriously ill were sent to the field hospital at Stevenson. 19 The greater part of the department's time was spent caring for the sick or preparing for an engagement with the withdrawing forces of General Bragg. Perin, meanwhile, demonstrated the foresight of an experienced staff officer by trying to anticipate events. He surveyed the area of operations in

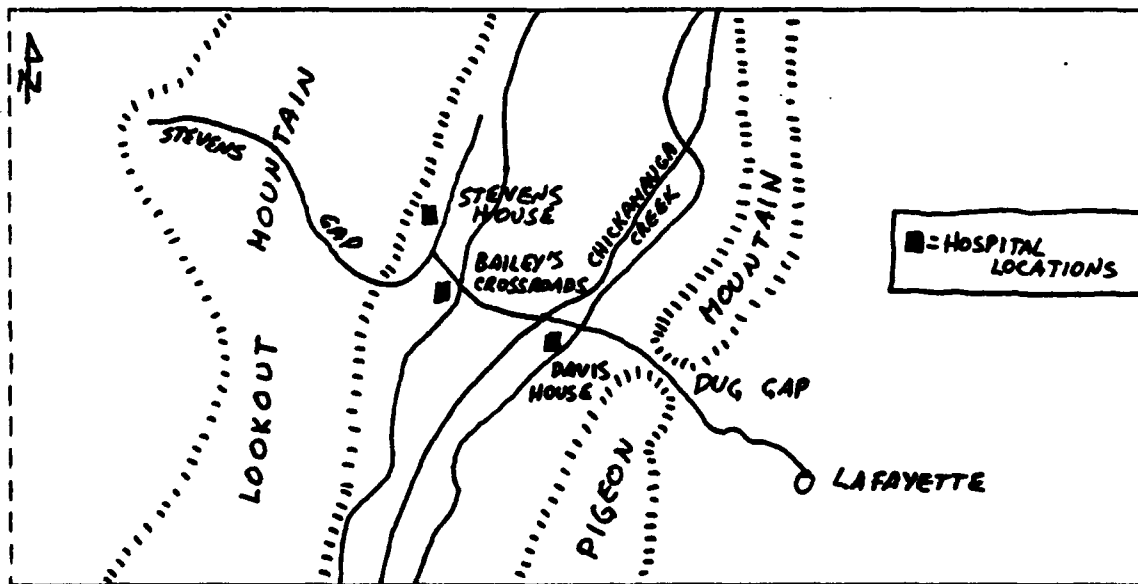
order to evaluate the availability of food for the wounded and lines of evacuation to Stevenson and the rail network that ran further north. 20

The only instance of skirmishing between the armies requiring establishment of a medical facility occurred on 11 September before Dug Gap. This gap opens through Pigeon Mountain onto the area in which Bragg was consolidating. Here James Negley's Second Division of XIV Corps was threatened by the approach of two of Bragg's divisions, Thomas Hindman's and Patrick Cleburne's. Bragg's intent was to trap an unsupported Negley in McLemore's Cove and attack him on his left flank and along his front. The Confederate forces moved slowly, however, and failed to destroy Negley's main body of troops, which were then supported by Absalom Baird's First Division. Instead, the battle was limited to heavy skirmishing and ended with both Federal divisions positioned before Stevens's Gap.

The two division surgeons-in-chief, S. Marks and Roswell Bouge, in First and Second Divisions respectively, quickly formed a partnership in responding to the need for medical support. Their initial actions placed the division ambulances at the foot of Lookout Mountain, where they subsequently established a consolidated field hospital. The joint hospital site was located about 1100 yards behind the front line of troops and took advantage of an existing building, the Widow Davis's house. Skirmishing began just

before noon with about ten wounded soldiers being received shortly thereafter. At the same time, however, the Union commanders, Negley and Baird, recognized their plight and began to withdraw their forces toward Stevens's Gap.

As a result of the Union withdrawal, and concurrent placement of artillery pieces around the house, Marks and Bouge were forced to relocate the hospital. Fortunately, as an existing structure had been chosen, little equipment and no tentage had to be disassembled and repacked onto the hospital wagons. The wounded were placed in ambulances called forward from their rear parking area and moved to a house at Bailey's Crossroads. Within an hour however, the continuing withdrawal forced a second transfer of the wounded. This movement established the hospital in the Stevens House at the foot of Lookout Mountain.



Map 6. Hospitals at McLemore's Cove, 11 September 1863.

Twenty-seven soldiers were wounded as a result of the engagement. They received continuous care at the Stevens House hospital until 16 September, when orders were issued for XIV Corps to move north. During this stay, two seriously wounded soldiers died and two returned to their regiments. Of the remaining patients, three were too critically injured to be moved and were left at the house with one medical officer and two nurses. The other wounded, twenty in number, along with forty sick soldiers, were transferred in ambulances, by way of the Chattanooga Valley road, to the hospitals in Chattanooga. Accompanying the ambulance train were three nurses and a physician. Division reports do not indicate if any of these medical personnel returned prior to 19 September. ²¹

Chattanooga had become available as a hospital location following the Confederate evacuation on 8 September and the Union occupation the following day. On 10 September Perin sent a telegram to Israel Moses, a surgeon assigned for duty at Murfreesboro. ²² He ordered Moses to move immediately to Chattanooga, with instructions to organize a general hospital system that could treat and hospitalize three thousand wounded. For reasons that are not made clear in after-action reports, Moses did not arrive at Chattanooga until 18 September. ²³

To accomplish the hospitalization portion of Perin's orders required far more buildings or tents than were then

available. Moses reported that he found just two distinct hospitals with beds to accommodate 650 patients. Bragg, however, had been forced to leave behind about 150 sick and wounded which limited the available space to only 500 beds. Additionally, the two Confederate hospitals "were without doors or windows, and destitute of every convenience." ²⁴ This is an interesting report on the part of Moses as it demonstrated how thoroughly and effectively the Stout plan converted general hospitals into mobile organizations. ²⁵ Moses was, therefore, forced to identify buildings that could be pressed into hospital service in order to fulfill the assigned number of three thousand beds. He was not able, however, to actually establish the beds in those facilities. As a result, only 500 beds would be readily available for any wounded Moses received.

Moses's second requirement, to treat the wounded, required medical officers and supplies sufficient for the number of wounded expected. For staffing his hospitals, Moses was left to his own devices. Only two physicians, then located at the general hospital in Nashville, were tasked to report to Chattanooga. Their route would have taken them by rail through Murfreesboro to Bridgeport and then by wagon to Chattanooga. It is not reported if they actually arrived. ²⁶ Apparently, the 43 medical officers that did serve in the Chattanooga hospitals came from the field organizations after the fighting ended. ²⁷

Moses also discovered that the supply situation was as bleak as the availability of beds since Perin had only been able to forward a limited amount of medicines and equipment. In fact, Moses "found scant supplies for not more than five hundred A partial supply of medicines, blankets, furniture, and dressings was on hand . . . but deficient in many articles." ²⁹ Since all reserve medical supplies were on the battlefield with the corps trains, the Chattanooga hospitals initially remained stocked as Moses found them on 18 September.

Medical supplies were enroute, however. Perin, who had been preparing Chattanooga as a hospital site for the nine days between its occupation and surgeon Moses's arrival, had called for supplies to be sent forward. These supplies were probably brought in from the field hospitals at Stevenson and Bridgeport. These, in turn, were being restocked from depots at Murfreesboro and Nashville. ³⁰

One other source of much needed supplies was the Western Sanitary Commission. This civilian commission was formed in September 1861 with the self-assigned mission of providing for the welfare of soldiers. ³¹ The Commission, headquartered in St. Louis, had depots throughout the West. Commission depots at Nashville and Murfreesboro were providing supplies to the area of middle Tennessee. Since

18 August Rosecrans had been authorizing the Sanitary Commission to send half a car-load of goods a day on the Army's passenger train from Nashville. ³¹

The arrival of the Army of the Cumberland and its medical department at Lee and Gordon's Mill on 18 September signaled an end to the Union's preparations for battle. The Army's medical system to this point was adequate for meeting the needs of the march and served its soldiers well. To support future operations, corps reserve medical supplies were intact, hospitals were being prepared in Chattanooga, and evacuation routes were open to the Tennessee River by wagon and to the north by rail. The 18th also signaled an end to preparations in the Army of Tennessee.

CONFEDERATE ACTIONS MOVING TO CHICKAMAUGA

Confederate medical department actions prior to the Battle of Chickamauga can also be examined in relation to the need to provide hospitalization and treatment for the sick and wounded. As the Union Army of the Cumberland was departing from the area around Tullahoma, General Bragg's medical department operated five general hospitals in Chattanooga. An additional 26 hospitals were located in towns to the south. ³² By 8 September, however, the Confederates had removed all hospitals and all but 150 of the sick and wounded from Chattanooga. What occurred during this period of 24 days was an example of a well developed medical plan successfully meeting the needs of the moment.

Rosecrans's deceptive move to the Tennessee River succeeded in obscuring his whereabouts until Eli Lilly's Federal artillery fired into Chattanooga on 21 August. ³³ Due to the shelling, Stout, Bragg's medical director for general hospitals, abandoned his Gilmer Street office and established his new headquarters at Dalton, Georgia, 25 miles to the south.

Just when the evacuation of patients and hospitals began and ended is not recorded. On 29 August, however, at the headquarters of the Federal Third Division, XIV Corps, a civilian reported that, as early as 14 August, Bragg was evacuating Chattanooga, including removal of the sick. ³⁴ Further, Colonel John Wilder, whose artillery shelled the city, reported on 5 September, that ambulances had been moving between Tyner's Station and the city 'as if disposing of their sick, preparatory to a move.' ³⁵

The repositioning of Stout's general hospitals was based on at least three requirements. To maximize their effectiveness the hospitals had to be located no farther north than Resaca and, secondly, they had to be near the railroad network that ran south from Chattanooga. Thirdly, within the limit of state rights, permission had to be granted for the use of medically desirable buildings.

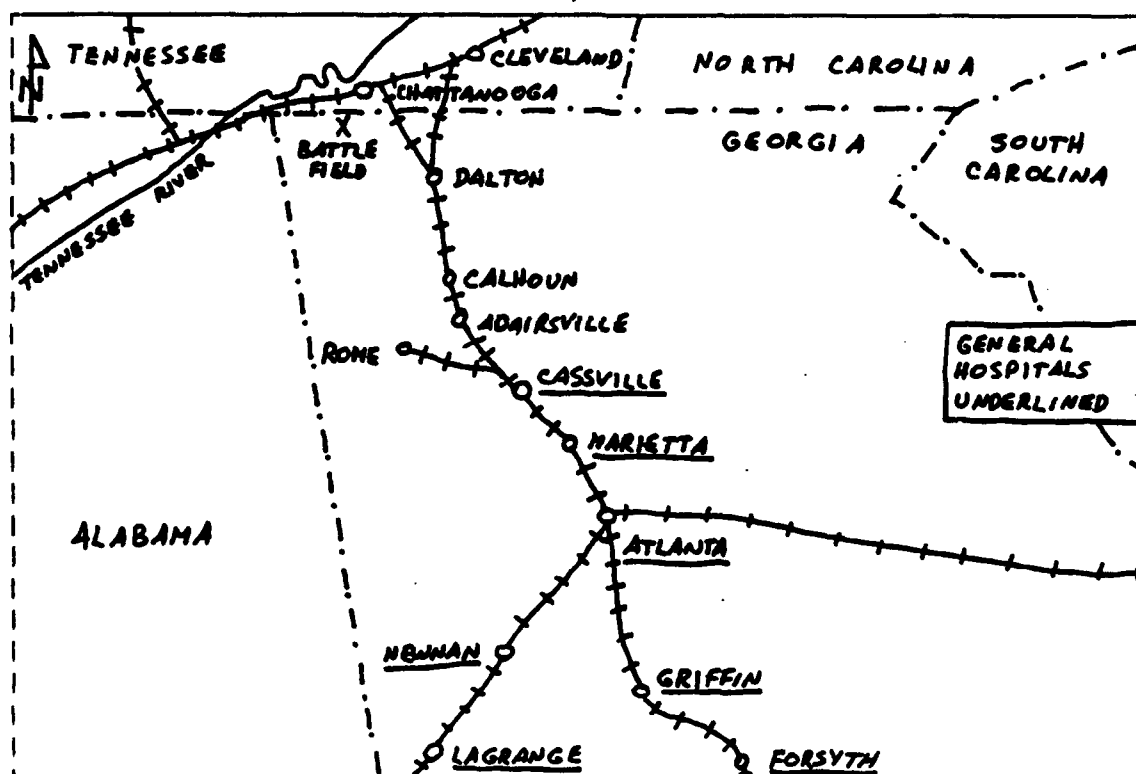
The guidance to move the general hospitals to sites no farther north than Resaca went to Stout from Flewellen on 6 September. 'All miscellaneous from Hospitals . . . will

be immediately sent to the rear. The Hospitals as low down as Resaca will be vacated." 36 It is clearly understandable that, in a time of uncertainty, the general hospitals would be moved as far as possible from any potential battlelines. Bragg, in fact, authorized Stout to move the hospitals to the south and west of Atlanta, 111 railroad miles to the southeast, if necessary. 37 Stout's limit to his southern movement was to be a line running along the railroad to the southwest out of Atlanta. 38

This option had been anticipated by Stout as seen in his telegrams to surgeon Joseph Logan, the senior surgeon at Atlanta. Between 23 and 29 August, Stout had been calling for the movement of most Atlanta based patients. Those fit to perform field duty were to be returned to their units while transportable patients were to be evacuated to Rome and other convalescent camps. 39 And, as early as the 29th of August, Stout was warning Logan that "should a battle begin within a week I am fearful your hospitals will be crowded to overflowing." 40

The second basing requirement was caused by Atlanta having neither the room nor resources to hold all of the general hospitals belonging to Bragg's Army of Tennessee. As a result, other towns had to be selected as sites. Since Confederate wounded were usually evacuated by rail, the primary consideration for these new sites would have been the availability of railroad siding.

State rights was an issue raised with Stout's decision to base a hospital at Marietta. The town boasted a state-owned military institute that was ideal for housing a hospital. Governor Joseph Brown, however, upset at Bragg's 'abandon[ing] the state of Georgia,' refused Stout's request to use the institute's buildings and grounds. Stout puts the loss of this site at 500-600 beds. ⁴¹



Map 7. Confederate General Hospitals, 18 September 1863.

The efficacy of Stout's mobile general hospitals can be seen by illustrating the movement of one. The Cherokee [Catoosa] Spring General Hospital was initially located immediately southeast of Ringgold. On the afternoon of

Sunday, 6 September, the surgeon-in-charge received orders to pack up the hospital and move to Newnan. Within hours equipment, supplies, and patients were packed and ready to be loaded on rolling stock. By 6:00 p.m. on the following day the hospital arrived at Dalton along with the Ringgold hospitals. All of the third day was spent on the move passing many other hospitals packing up to move. At 8:00 a.m. on Wednesday, 9 September, the Cherokee Hospital arrived at Newnan. In less than 72 hours a 250-500 bed general hospital had received orders and relocated by rail to a site about 130 miles south. ⁴²

At least one receiving and shipping hospital was established to support the Army. These hospitals served as a temporary facility for transferring patients from the Army's brigade hospitals to the general hospitals in the rear. This hospital was moved from Chattanooga to Resaca during the second week of September. ⁴³ Within the week, however, medical director Flewellen was forced to return the hospital north to Ringgold. This series of movements was the result of an ongoing weakness in the Army of Tennessee: a lack of ambulances. Due to this shortage, the medical department was forced to evacuate sick and wounded soldiers on regimental supply wagons sent to pick-up supplies at the Army's depot at Resaca. As the depot moved north to

Ringgold in preparation for battle, therefore, so did the receiving hospital. Only in this manner could Flewellen be assured of continuous evacuation for the wounded. ⁴⁴

By the eve of the battle Stout had successfully relocated the general hospitals originally located at Chattanooga, Ringgold, Cleveland, Catoosa Springs, Tunnel Hill and Dalton. Bragg's Army entered the fight with about 7,500 hospital beds located as shown in Map 7, page 53. ⁴⁵

While meeting the hospitalization needs of the Army, concurrent attention was given to the needs of arranging the treatment assets. Flewellen's specific concerns were having sufficient medical supplies as well as enough surgeons to care for the wounded of a general engagement.

In light of the Federal inclusion of medicines, medical supplies, and medical equipment in its blockade of the South, it would seem reasonable that these items would be in as short a supply as ambulances were. This, however, does not seem to be the case. Evidence of this is found in two messages from the Army's medical director. First, Flewellen instructed his chief surgeon of reserves to ensure that his brigades had sufficient on-hand quantities of chloroform, morphine, opium, whiskey, dressings, and other needs. ⁴⁶ The second message, sent at the end of August, required that each division chief surgeon report the inventory of excess supplies, medicines, and hospitals held at brigade and division level. ⁴⁷ The indications appear to

be, at least indirectly, that Bragg's Army had the medical supplies and equipment needed for field actions.

James Longstreet's reinforcements from Virginia were an exception in the matter of adequate medical supplies. In order to transport the infantry elements with the limited number of rail cars, Longstreet chose to leave supply and medical trains, as well as artillery and cavalry, in Virginia. As a result, Longstreet added some 6,000 soldiers to the fight but without a single medical supply wagon in support. Fortunately, most of the Virginia regiments did arrive with ambulances. ⁴⁰

The same degree of sufficiency does not seem to apply to medical officers in support of the Army in the field. Between 13 September and the start of the battle Flewellen sent Stout several requests for surgeons. On the 13th Flewellen requested ten to fifteen medical officers each having his own horse. He further stated that if a choice had to be made between a physician with a horse and one who demonstrated efficiency, the selection was for the efficient one. ⁴¹

Stout may not have received this request since Flewellen sent a follow-up message on the 17th asking 'where is your reply to letter of 13 September?' ⁴² In response to either the first or second message, Stout detailed seven surgeons and six assistant surgeons to report to the Army in the field. ⁴³ Two days later Kate Cumming reported that a

number of surgeons from the general hospital at Newnan left for duty with the Army of Tennessee at La Fayette. ⁵²

Another source of physicians for field duty was the recall of medical officers sent earlier to perform temporary duty at the general hospitals. To accomplish this, Frank Ramsey, the chief surgeon of Simon Buckner's Corps, sent messages on 14 and 16 September to his detached surgeons. Effective upon receipt of the letter the surgeons were reassigned to field duty with the brigade hospitals of Buckner's Corps. ⁵³

There is no readily available evidence to show how many of these detailed or recalled medical officers refused, or simply failed, to report for field duty. The problem was serious enough, however, for Stout to send a circular to surgeon Logan, in charge of the Atlanta hospitals, two days after the battle. In his message, Stout complained that surgeons were not reporting to the field as ordered. In the future, he warned, physicians would report within 24 hours or legal charges would be preferred. ⁵⁴

The medical department also had problems with the non-medical staff officers of Bragg's Army and Department. This failure to work as a team was particularly significant considering the need to cooperate in organizing the many movements of the general hospitals prior to battle. This failure, however, was not unique. Stout, for example, complained about the lack of support from the quartermaster

and subsistence officers as early as the Battle of Shiloh, 6-7 April 1862, and as late as Bragg's encirclement of Chattanooga, 1 November 1863. ""

Flewellen appears to have developed an agreement with the Army quartermaster and subsistence staff officers that would minimize Stout's concerns. On 2 September the Army's quartermaster, Major M.C. McMicken, sent a directive to the assistant quartermaster tasking him to arrange for the erection of hospitals at Dalton, Marietta, and elsewhere. Further, the officer was to 'Confer with Surgeon Stout . . . and carry out his wishes relative to the Hospitals.' "" A follow-up was then sent from Flewellen to Stout on the 15th notifying Stout that he should require the quartermaster and commissary officers supporting a hospital to accompany that hospital during a move. Only then was Stout required to inform the Army staff of the move. ""

Despite these efforts, Stout reported to Moore that the greatest hindrance to the mobility of general hospitals was the absence of any assistance or material support from the quartermaster and subsistence officers. 'When hospitals are removed,' he wrote, 'it is often the case that they are for weeks without aid from these departments.' "" In fact, Stout claimed that since staff support was unavailable at hospital sites in Calhoun and Adairsville, he was forced to relocate them. Staff support was also lacking at sites in Griffin, La Grange, Newnan, and Resaca. ""

Staff coordination was periodically deficient within the medical department itself. Flewellen had to remind the corps medical directors to promptly deliver patients to the line of supply wagons in order to take advantage of backhaul evacuation. ⁶⁰ And, although he visited Army headquarters often when co-located in Chattanooga, Stout found guidance difficult to obtain when he was removed to Marietta. ⁶¹ On 17 September, in evident frustration, Stout warned Flewellen that "unless you communicate with me I cannot meet the expectations of the Army" ⁶² This situation lasted until a few days after the battle. ⁶³

Despite problems with equipment, personnel, and staff cooperation Flewellen's medical department had taken all reasonable and available precautions to support the Army. Medical supplies seem to be in sufficient stock to provide for Longstreet's troops from Virginia. The shortage of ambulances was minimized through the use of backhaul evacuation with supply wagons. Finally, general hospitals were moved, reestablished, protected, and alerted to the probability of combat around Chattanooga.

SUMMARY

Two years of campaigning had taught many valuable lessons to both Union and Confederate medical departments. Surgeons in both armies addressed hospitalization and treatment of the sick and wounded in order to support the soldiers in the field. Practiced staff coordination and

energetic, individual efforts led to adequate medical plans in preparation of the upcoming battle. Though problems existed in the achievement of an error-free system, both medical departments succeeded in at least laying a properly planned foundation for supporting the wounded of their respective armies.

ENDNOTES

CHAPTER 4

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4. Tucker, Chickamauga 60.
5. OR 30/3: Message, Thruston to Davis, Reference Stanley, 9 Sept. 1863, 992; MSH 1/APP: Reference 21st Wisconsin, 270.
6. Albert Hart, Personal Papers, 31 Aug. 1863, Hart Papers, Western Reserve Historical Society, Cleveland, OH.
7. OR 30/3: Message, Starkweather to Flynt, 18 Aug. 1863, 68; OR 30/3: Report, Hamilton to Rosecrans, 31 Aug. 1863, 247-8.
8. D. Lathrop, The History of the Fifty-Ninth Regiment Illinois Volunteers (Indianapolis: Hall & Hutchinson, 1865) 214.
9. MSH 1/APP: 266, 287.
10. MSH 1/APP: 267.
11. OR 30/3: Message, Watkins to Stanley, 31 Aug. 1863, 261.
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14. OR 30/3: Orders, Oldershaw to Palmer, 5 Sept. 1863, 370; OR 30/3: Orders, Oldershaw to Wood, 5 Sept. 1863, 983; MSH 1/APP: 268.

15. OR 30/3: Corps General Order 28, 31 Aug. 1863, 252-3.
16. MSH 2/3: 915-20, A description of the broad array of supplies carried in these wagons is found in a lengthy footnote at pages 917-9; MSH 1/APP: 266.
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19. MSH 1/APP: 287.
20. MSH 1/APP: 266-7.
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23. MSH 1/APP: 281; The Official Records copy of the same report states 'beds for 5,000 wounded,' OR 30/1: Report, Moses to Perin, 1 Oct. 1863, 244; The report of Dallas Bache, Army Headquarters staff surgeon, sets the requirement at one thousand beds, MSH 1/APP: 287.
24. MSH 1/APP: 281.
25. Stout 'Outline' 69-70.
26. Telegram, Headquarters to Thruston, 18 Sept. 1863, Department of the Cumberland, Letters Received, 1862-1865, Record Group 393, Entry 925, National Archives, Washington, DC.
27. MSH 1/APP: 282.
28. MSH 1/APP: 281.
29. MSH 1/APP: 266-7.
30. Jacob Foreman, The Western Sanitary Commission (St. Louis: R.P. Studley, 1864) 7.
31. Foreman, Western 96; Telegram, Headquarters to Innes, 18 Aug. 1863, Department of the Cumberland, Letters

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32. Weekly Report of Hospitals, 14 Aug. 1863, Box 2G425, Stout Papers, University of Texas, Austin.

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51. Message, Stout to Flewellen, 17 Sept. 1863, Box 2G427, Stout Papers, University of Texas, Austin, TX.
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54. Circular, Stout to Logan, 22 Sept. 1863, Box 2G432, Stout Papers, University of Texas, Austin, TX.
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63. Report, Stout to Moore, 10 Oct. 1863, qtd. in Cunningham, Doctors 279.

CHAPTER 5

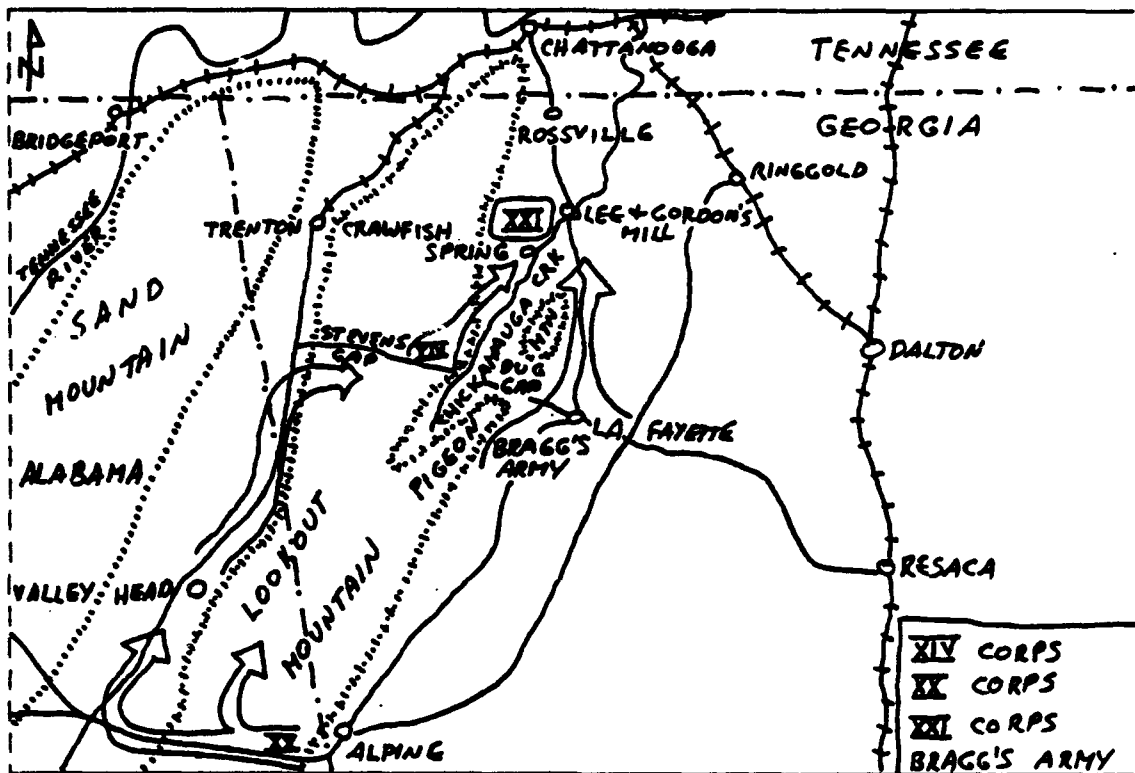
MEDICAL SUPPORT AT THE BATTLE OF CHICKAMAUGA

THE BATTLE OF CHICKAMAUGA

After crossing the Tennessee River, and believing that Bragg was retreating toward Rome or Atlanta, Rosecrans sent his Army of the Cumberland in headlong pursuit of the Confederates. The line of march south for the three corps was, in the main, dictated by the need to cross five parallel mountain ranges. The available passes through the ranges forced the Union Army to advance along three routes with over 50 road-miles between the north and south axes. The danger of splitting his Army became apparent to Rosecrans as a result of the attacks on Negley's and Baird's divisions in McLemore's Cove. Late on 11 September the Union commander began directing the consolidation of his corps in the vicinity of the Lee and Gordon's Mill. These movements were completed by 17 September with the Army forming a general line from Pond Spring north to Lee and Gordon's Mill. ¹

From available intelligence, observations, and speculation Rosecrans realized that Bragg planned to march north and place his forces between Chattanooga and the Army

of the Cumberland. What he did not know was that Bragg had ordered his commanders to cross the Chickamauga Creek and wheel left in order to roll up Rosecrans's left flank. ²



Map 8. Movement of Forces, 11-18 September 1863.

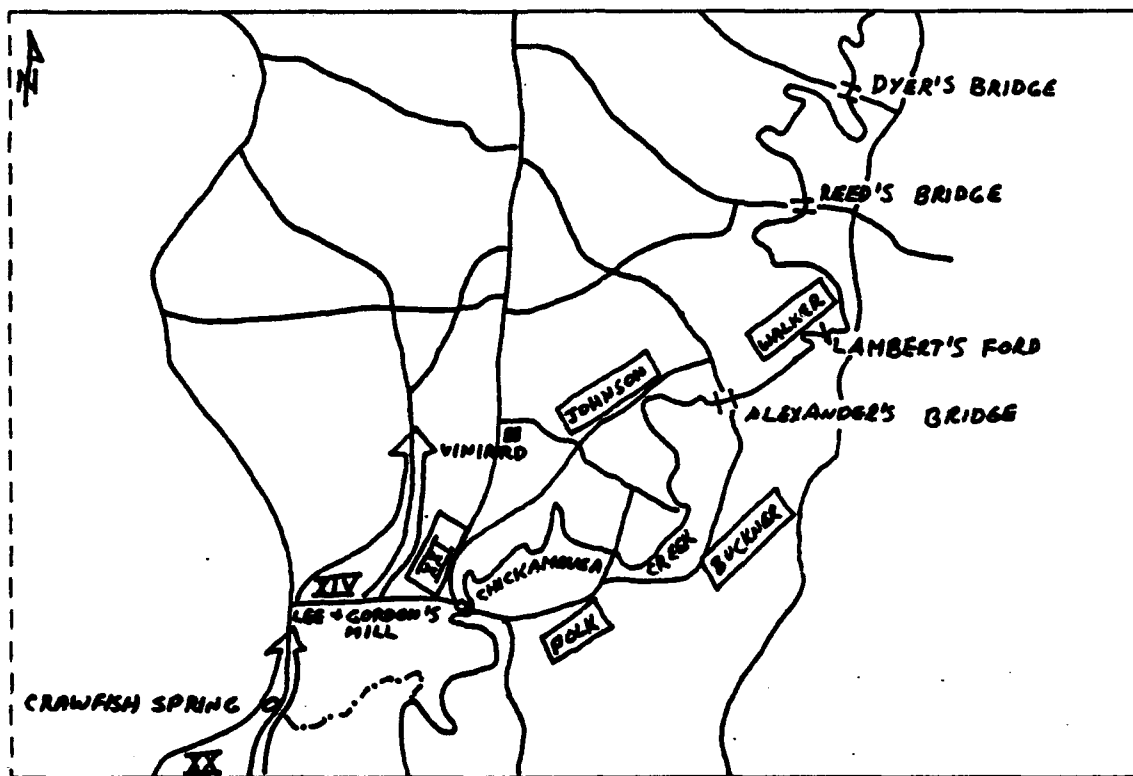
On the morning of 18 September, Union forces began moving down Chickamauga Creek, to the northeast, in order to protect the Rossville to La Fayette road. These movements were intended to place George Thomas's XIV Corps on the left around the Kelly Farm, Thomas Crittenden's XXI Corps in the center between XIV Corps and the Lee and Gordon's Mill, and Alexander McCook's XX Corps on the right at the Mill and in reserve. Bragg, meanwhile, was moving his forces northward

along the east bank of the creek. His plan was to cross the creek and position his Army between Chattanooga and the Union's left flank.

The battlefield was generally quiet as the armies maneuvered for position on the 18th. Fighting, though, did break out at Reed's Bridge, protected by Robert Minty's cavalry, and at Alexander's Bridge, covered by John Wilder's brigade of mounted infantry. Bushrod Johnson's Division crossed Reed's Bridge around 4:00 p.m. and advanced to within 800 yards of the Viniard House before putting his command to ground for the night. ³ William Walker's Corps was driven away from Alexander's Bridge and crossed the Chickamauga later that evening at Lambert's (also known as Byram's) Ford. These units camped on the ground they held following their crossings. ⁴

While the Confederates rested the Federals marched. After marching throughout the night and into the next morning, 19 September, the lead elements of Thomas's XIV Corps had reached the Kelly Farm by sunrise. The Battle of Chickamauga began in earnest about 7:30 a.m. that Friday morning when Third Division of XIV Corps ran into the elements of Nathan Forrest's Cavalry that had crossed the creek during the previous night. ⁵

The battle raged for the remainder of the 19th and all of Sunday, the 20th. At about 11:00 a.m. on Sunday

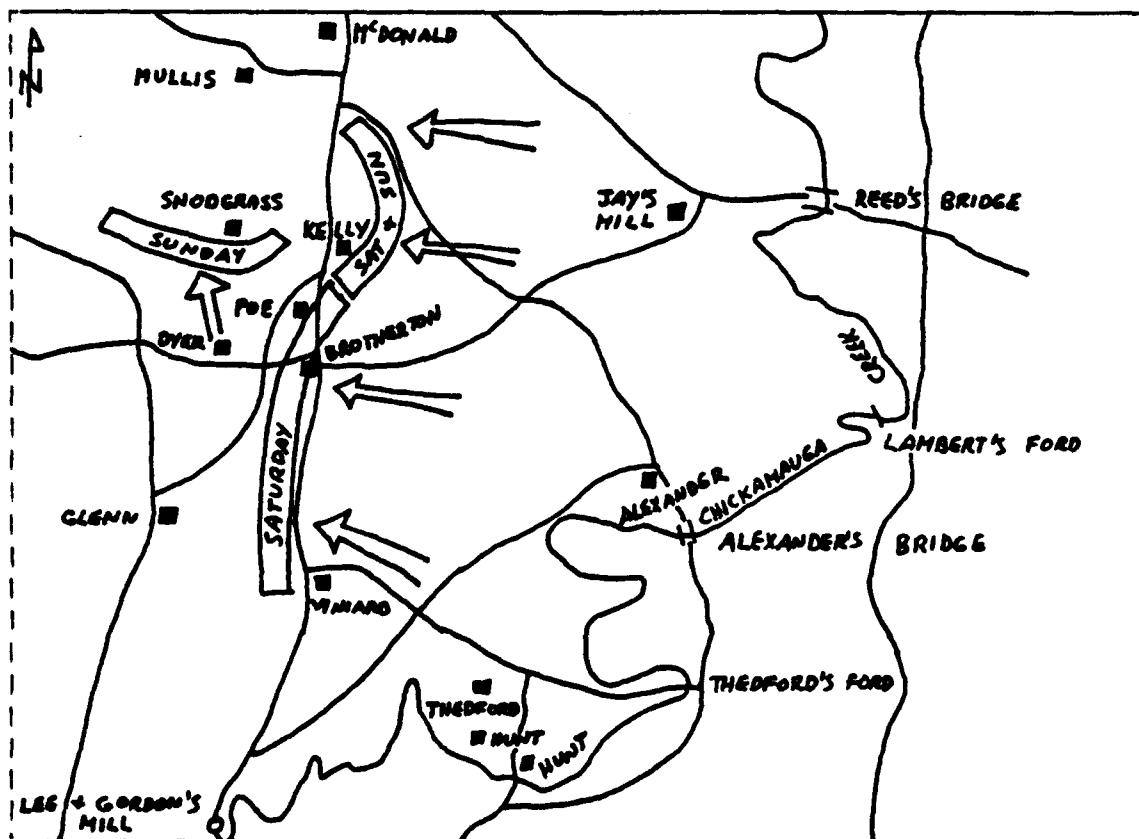


Map 9. Disposition of Forces, Dark, 18 September 1863.

Bragg's left wing, under the command of James Longstreet, advanced and broke through the Union lines at the Brotherton House. * Several of Rosecrans's divisions broke under the assault and were routed from the battlefield. Rosecrans, Crittenden, McCook, and the majority of their staffs were also carried away from the field. Many Federal regiments, however, regrouped on Snodgrass Hill, behind Thomas's forces which had not broken and were still on line.

Although the Union right had been defeated, the center and left continued to hold. For the remainder of the day the Confederate units attacked Thomas along his front and flanks. To his advantage, Thomas had the bulk of his

forces behind breastworks or atop the rugged terrain of Snodgrass Hill. As a result, the remaining Union forces were able to hold their ground. Gordon Granger's Reserve Corps arrived by 1:00 p.m. from McAfee's Church at Rossville bringing much needed ammunition and an infantry division to continue the fight. ⁷ General Thomas retired from the battlefield that night and consolidated the Army along Missionary Ridge around Rossville. From 9:00 p.m. of the following day to 7:00 a.m. Tuesday, 21 September, these forces conducted a withdrawal to a defensive line before Chattanooga. • This move ended the Battle of Chickamauga. •



Map 10. The Battlefield, 19-20 September 1863.

UNION MEDICAL SUPPORT AT CHICKAMAUGA

As the battle developed the Army of the Cumberland's medical department went about its mission of coordinating and providing medical support for the wounded. No better summary of this support is found than that provided by Dr. Konrak Sollheim, regimental surgeon, 9th Ohio of Third Division, XIV Corps. ¹⁰

'The battle of the 19th was still young, but our regiment had already suffered numerous dead and wounded. I was brigade physician. Under me were a half-dozen physicians and fifteen orderlies in a field hospital, and perhaps as many at the front, to hunt up the wounded, administer first-aid, and so forth. The hospital was about two-and-a-half miles from the battlefield, in a church, a magazine, and a cooper's shop.

All day countless ambulances arrived loaded with wounded. At 11:00 p.m. those buildings were overfilled. The scene was indescribable

We could not start amputating until the morning of the 20th, after initial bandages had been applied, and after bullets and bits of clothing had at last been removed from wounds--in short, only after we had done what was critical to minimal care for the many injured and their manifold needs We were soon under artillery bombardment. Then an order arrived from the chief physician. I was to take all the severely wounded with me in ambulances to Rossville The rest of the wounded, those not badly hurt, were to walk there.

Too late! The battle already threatened the hospital Enemy infantry stormed at us, and the word was, Save yourself if you can! Chaos. Ambulances took the lead, some empty, others loaded with patients. Physicians followed afoot and on horseback Why should the enemy be at all concerned about our injuries, when he had suffered so many of his own?'

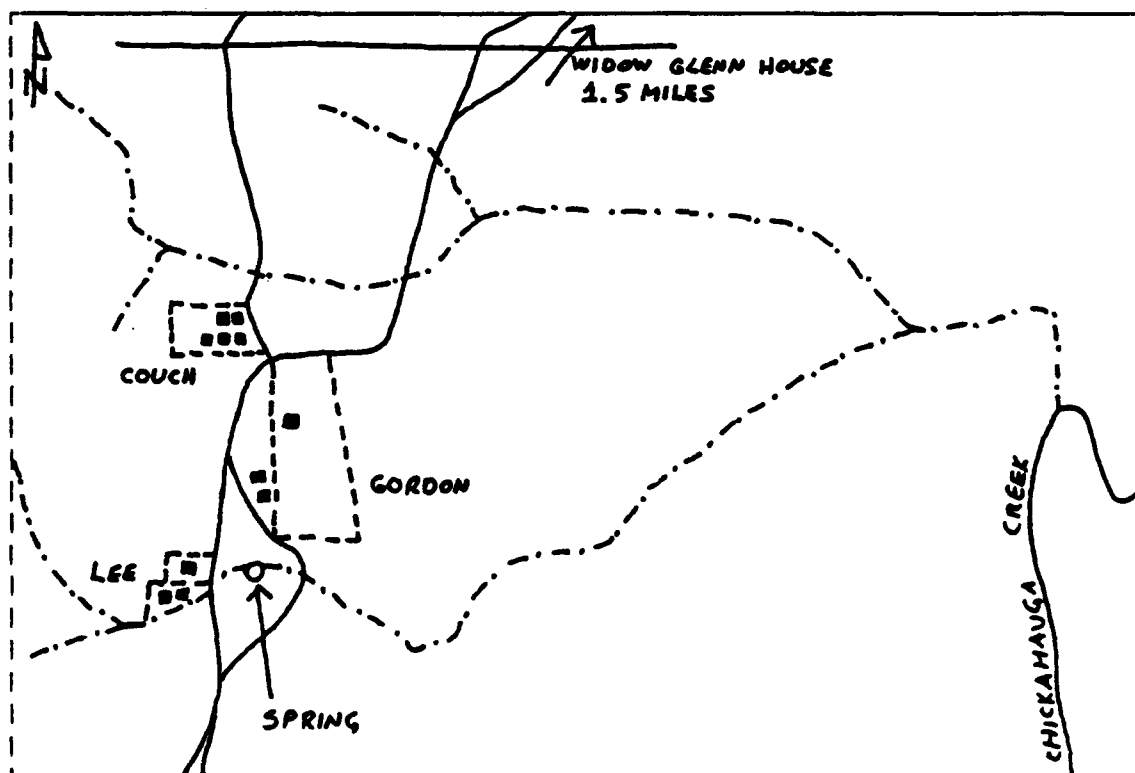
Fig. 6. A Surgeon's Observations of the Battle.

The Union Army's medical support began on Friday, 18 September, while units were still marching to positions

for the upcoming battle. Crittenden's XXI Corps was already located at Lee and Gordon's Mill while XIV and XX Corps were on the march to consolidate at that point. Realizing that a battle would break out shortly, William Blair, chief surgeon of First Division, XXI Corps, set to work organizing his division hospital at a site he chose west of the Mill at Crawfish Spring. ¹¹ This was the only established hospital on the 18th. As a result, it received the wounded coming out of the fighting around both Reed's and Alexander's Bridges. Blair reported that 15 wounded soldiers arrived late in the evening from Wilder's Brigade and 15 of Minty's cavalymen arrived at about nightfall. ¹² It appears that the medical officers at both bridges sent their wounded to their rear, where hospitals would normally be expected to be found.

Indeed, on the 18th the divisions were still moving north with their supply and ambulance trains in trail behind them. At this point medical director Perin, now realizing that a general engagement along the Chickamauga Creek was imminent, began directing his corps surgeons to place and establish their division hospitals. ¹³ Having kept an eye to the topography Perin was able to establish several facts. First, the Army was separated from Chattanooga's general hospitals by Missionary Ridge. Therefore, evacuating patients to the city would require field hospitals to be located in the vicinity of the gaps through the ridge. Second, the springs on the south side of Missionary Ridge

were suffering from an unusually dry period in the region. This meant that the division hospitals would have to be placed at the few running springs available south of the ridge. The only alternatives would have been to locate the hospitals north of the gaps in the ridge, along the Chattanooga Creek, or at the few springs. Perin, after discussing the options with Rosecrans, chose to have the hospitals placed at Crawfish Spring. ¹⁴



Map 11. Crawfish Spring.

Critics of Union medical support at Chickamauga seem to have chosen Perin's Crawfish Spring decision as the basis for most of what they believe went wrong in that support. ¹⁵

The location, they state, left the hospitals exposed along the Army's right flank, was not in line with the route between the battlefield and Chattanooga, and limited and extended escape routes to the roads leading to McFarland's Gap. Though all of these criticisms are accurate, they are also incomplete. Also of importance was the location of Crawfish Spring as it pertained to this particular medical and tactical situation. Medically, the spring offered at least one advantage for the location of hospitals--water.

Civil War medicine was heavily dependent on water as a provision and a treatment. Many wounded soldiers could only swallow liquids. To meet this need required that water be available so hospital personnel could prepare soup, coffee, and tea. ¹⁶ As a treatment, water was needed to clean, and then dress, the wound. A typical question on a surgeon's examination board of the period was "How do you treat gunshot wounds?" The acceptable answer was to "apply cold water dressings, after controlling hemorrhage and removing foreign bodies." ¹⁷

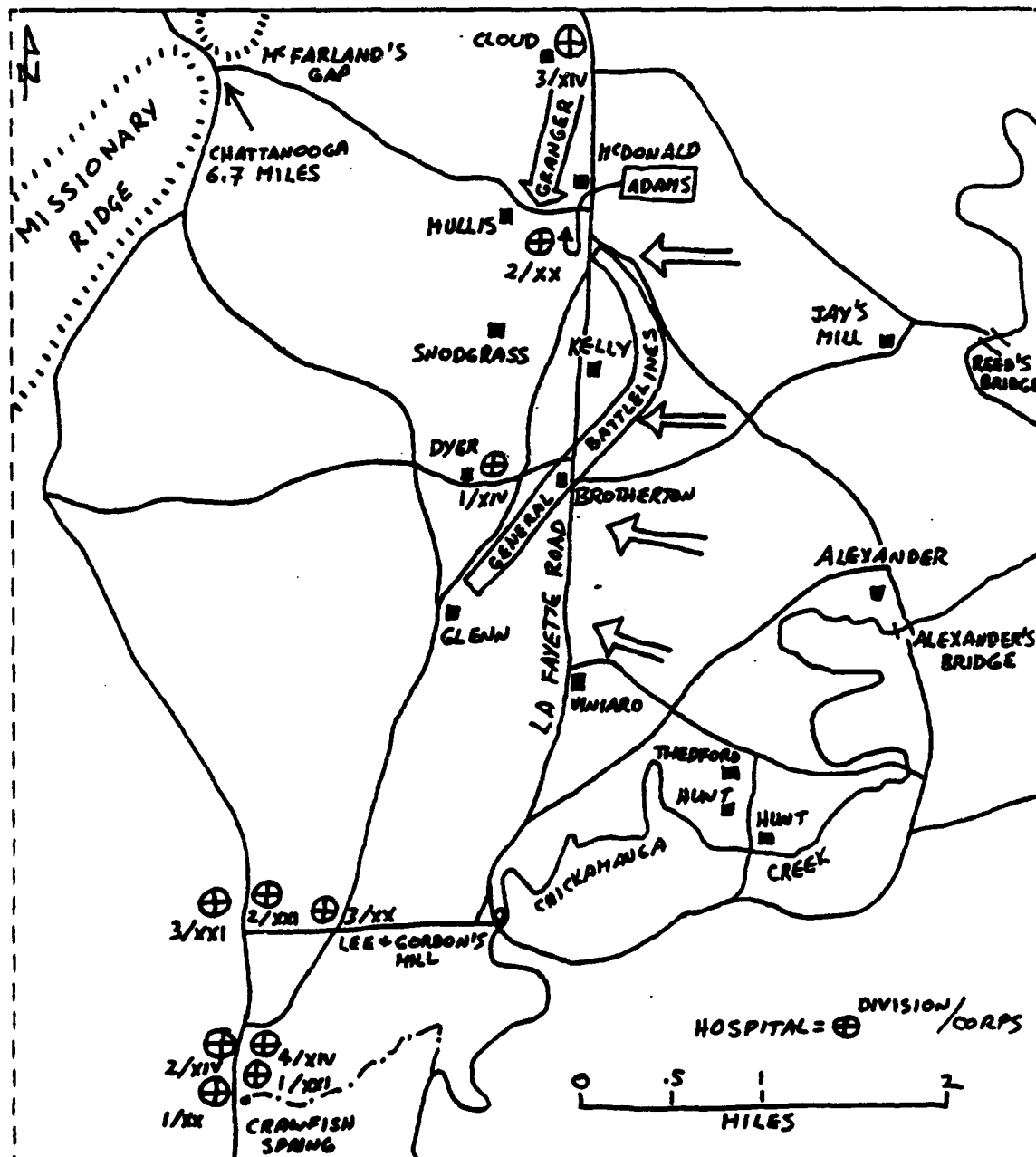
Unfortunately, the area south of Missionary Ridge was lacking in sufficient water supplies in September 1863. Assistant Secretary of War Charles Dana reported that except for Chattanooga and Chickamauga Creeks there were "no other places near here where an army can find water." ¹⁸ Crittenden wrote twice on 12 September that the only water in the region was that available from the Chickamauga. ¹⁹

Crawfish Spring flowed directly into the creek and provided 'a large and excellent supply of water.' ²⁰

As important as a need for water, the tactical situation also provided a rationale for placing the hospitals at Crawfish Spring. Specifically, the battle of the 19th was fought, in contemporary terms, as a meeting engagement with Rosecrans's Union forces, still on the move, meeting the Confederates at an unexpected time and place in an attack from the march. ²¹ In this situation, and with the divisions moving northward, the hospital supply and ambulance trains had little opportunity to continue the march once the forces deployed into battle lines on the morning of the 19th. Moreover, hospitals had to be established quickly for the reception and treatment of any wounded. Though these hospitals would not be located between Chattanooga and the front units, they would, at least, be operational.

Presented with this scenario, Perin seemed to have scant choice but to locate his hospitals where they were, following the line of march. The division's medical assets of XXI Corps were already in the vicinity of Lee and Gordon's Mill, having reached there starting on the 11th. ²² The remaining division surgeons then passed the spring as their divisions followed the march route. When they did Perin and his assistant, Dallas Bache, directed them to stop, choose a site, and open their hospitals. ²³ Thus, as

the battle began on 19 September, seven of the ten division hospitals were located in the vicinity of Crawfish Spring. Given the northerly line of march, this was the Army's rear and a reasonable location for the hospitals.



Map 12. Union Field Hospitals, 19/20 September 1863. 24

Three division hospitals moved farther to the north and set up to the west of the divisions as they formed into an east facing line of battle. These hospitals belonged to the First and Third Divisions of XIV Corps and Second Division of XX Corps, the first three divisions in the Army's line of march. The official reports do not explain the reasoning behind the positioning of the hospitals. One can speculate, however, that these divisions, and their supply and medical trains, passed Crawfish Spring before Perin chose it as a consolidated site for hospitals.

Locations for the two hospitals belonging to XIV Corps are clearly reported. Surgeon Marks, chief of the First Division, XIV Corps hospital, followed his division's march throughout the night. Early on the morning of 19 September he became aware of the upcoming fight and began to look for a location for his hospital. He chose the Dyer house for the 'fine spring of water and quite a number of buildings in which the wounded could be made comfortable; also plenty of straw in the vicinity.' 20 Moody Tollman, surgeon of the Third Division, XIV Corps, also followed his division during the night. The next morning, under the guidance of General Thomas, Tollman established his hospital at the Cloud House. This location had 'good springs, a church, and several houses.' It was also on the main road to Rossville and Chattanooga. 20

The location of the third hospital, that of Second Division, XX Corps, is not specifically discussed in the official reports. Indirect evidence, and a comparison of the chief surgeon's report to the reports of Union and Confederate commanders, places the hospital southeast of the Mullis House, probably at the edge of the Mullis Field. ²⁷

Regardless of their location the division hospitals remained the second opportunity for care. Wounded soldiers were still first treated by a medical officer in support of their regiment. As the regimental surgeon of the 101st Indiana wrote: "I was at once stationed in a small ravine immediately in the rear of the Brigade, with orders to care temporarily for the wounded, put them in ambulances, and send them to the Field Hospital." ²⁸

Evacuation to the hospitals also followed standard procedures with "ambulances and litter bearers hurrying in from the lines with the wounded." ²⁹ Ambulances, as with the 36th Illinois, trailed closely behind their units until the forces deployed into combat. Then the ambulances would take up a position and the litter bearers, in many cases the regimental musicians, would follow the men into battle. ³⁰

Despite evacuation procedures developed through the actions of previous battles and campaigns, moving wounded soldiers was hampered by the topography of the Chickamauga Valley. The ground of the battlefield was largely broken and rolling while as much as two-thirds of the area was

thick with woods and heavy underbrush. ³¹ In this terrain, one wounded soldier walked about 110 yards before falling exhausted and being helped further until a litter bearer was found. ³²

Eventually, this soldier and many other wounded troops made their way to the division hospitals. The seven hospitals found in the vicinity of Crawfish Spring treated most of Saturday's wounded. The three XXI Corps hospitals, alone, reported having 1,100 patients of various divisions and corps at the end of the day. Surgeon Tollman, at the Cloud House, stated that his hospital treated nearly one thousand wounded on Saturday. ³³ Estimates of the total number of patients treated on the 19th range from less than 2,000, according to Assistant Secretary Dana, to the more realistic 4,500, as reported by Perin. ³⁴ By any estimate it was clear that "the surgeons [had] their hands fully occupied." ³⁵

In such a situation, where the number of wounded greatly outstripped the capabilities of the medical system, the physicians were forced to choose which patients were to be treated first, if at all. This need to triage patients was performed in the hospitals time and again. One soldier was (obviously incorrectly) told that any treatment used on him "was useless, as I would never see morning" ³⁶

As the fighting of the 19th came to a close all ten of the hospitals remained at their original sites. This

included The Second and Fourth Division hospitals, XIV Corps, which had tried to move during the day to stay within reasonable supporting distance of their troops. Exhausted, the combat soldiers slept on their arms in the battle-lines as shown at Map 9, page 70. Members of the medical department, however, continued throughout the night with their task of finding and evacuating the wounded. ³⁷

In the center of the line Alva Greist spent the evening listening to 'thousands of wounded in our front crying in anguish and pain, some for death to relieve them, others for water.' ³⁸ The wounded, in addition to their injuries, had to also contend with an unseasonably cold night as a heavy frost fell to the ground. ³⁹ In response, after dark fell on the battlefield, litter bearers were sent out to find, collect, treat, and evacuate the Federal Army's wounded. John Gordon remembered that 'in every direction were dimly burning tapers, carried by nurses and relief corps searching for the wounded.' ⁴⁰

Not all of the searching, however, went smoothly. In reports from the center and right flank of Rosecrans's line Confederate troops were accused of firing on the litter bearers. This sniping even occurred before the Fourth Division, XIV Corps, where a truce, recognizing the litter bearers, had been arranged. ⁴¹

These actions ended the medical support of the 19th. During this day the medical priority was to evacuate and

provide treatment to the soldiers of the Army from hospitals initially positioned behind their divisions. This priority would shift the next day to abandoning the battlefield while recovering as many of the patients and as much of the medical equipment and supplies as possible.

The Union right broke just before noon on the 20th resulting in the immediate isolation of the Crawfish Spring hospitals from the rest of the Army. The hospitals were not, however, unprotected. At dark on Saturday, Army commander Rosecrans tasked Robert Mitchell, commanding the Cavalry Corps, to provide support and protection to the Crawfish Spring hospitals. ⁴² By 2:00 p.m. on Sunday, however, Alonzo Phelps, chief surgeon of XXI Corps and the senior medical officer at Crawfish Spring, realized that his location had been isolated from the Army. He also saw that the cavalry was being pushed back from positions between the hospitals and the Chickamauga. ⁴³

At this point Phelps issued the necessary orders to evacuate the Spring as a hospital site. Priority for space on the ambulances and supply wagons went to the wounded, even though the surgeons did not want to leave any equipment or supplies behind. In the 99th Ohio, for example, up to half of all medical stores were unloaded from wagons to make room for the wounded. ⁴⁴ There were, of course, exceptions.

Cavalryman John Wyeth recalled 'coming upon an ambulance in which some musicians had piled their instruments as they joined the flight.' 45

Not all wounded were evacuated from the hospitals. Those with injuries serious enough to threaten the soldier's life, should he be moved, were left at the hospitals. When the evacuation had been completed XX Corps reported about 250 patients and six surgeons left at the Spring while XXI Corps reported that 200 patients and 14 surgeons stayed. 46 Other surgeons remained in the XIV Corps hospitals and with the three hospitals located to the north.

The number of lost patients and physicians may have been greater if not for the quick thinking of a medical officer with 'no military education or experience.' Surgeon E.H. Bowman had control of sixty ambulances enroute to Chattanooga. After pausing in a field, this ambulance train was unable to regain the road leading to McFarland's Gap. Bowman wrote that the nearby road was blocked by a seemingly continuous line of wagons fleeing from the Confederates. Bowman solved his problem by positioning the ambulances 'in echelon to the road' and finding a gap in the fleeing trains. He then forced a single ambulance onto the road in order to 'hold against all comers until I ran the entire train in.' 47 Other casualties were recovered when Wilder's

mounted infantry and Mitchell's cavalry gathered scattered ambulance and medical trains and came off the battlefield between 4:00 and 5:00 p.m. ⁴⁰

The movement from the Spring was first intended to take the hospitals through McFarland's Gap and into bivouac in the Chattanooga Valley. When they reached the gap, however, it was uncertain if Bragg would pursue Rosecrans's Army. To preclude another hasty evacuation, therefore, 'the ambulances, wounded men, and hospital arrangements were ordered to make their way with all speed to Chattanooga.' ⁴¹

Bragg's men over-ran the Crawfish Spring hospitals minutes after the ambulances and wagons left. ⁴² Despite the efforts of the remaining surgeons to clearly identify the hospitals the Confederates felt free to steal what they wanted: blankets, clothing, and equipment. The Southern cavalry commander, Joseph Wheeler, put an initial stop to the looting, but it reoccurred on Tuesday, 22 September. ⁴³

The withdrawal of hospitals in the center and left wing (Map 11, page 76) seems to have been accomplished with more planning and success. The First Division, XIV Corps hospital, located at the Dyer House, came under artillery fire on Saturday about 5:00 p.m. Initially the surgeons were forced to evacuate the position, but they soon returned and continued their work. On Sunday morning, however, due to the closeness of the fighting, division surgeon S. Marks chose to evacuate this site and leave the battlefield. The

division's medical support was then provided from Rossville. As a result of this prompt decision First Division, XIV Corps was able to remove all wounded, medical equipment, and supplies, save for one tent, from the battlefield. "2

The Second Division, XX Corps hospital also came under fire on Sunday morning. The wounded that had been loaded onto wagons in reaction to Adams's flanking movement were taken, first, into hiding behind a hill. They were then evacuated to Chattanooga. That afternoon, after Granger's reserves cleared the area, the remaining moveable wounded were taken to the Cloud House hospital, 1000 yards to the north. Thirty patients and four physicians, with necessary supplies and equipment, remained at the original site after the fighting of the 20th ended. "3

The Third Division, XIV Corps hospital, in the area of buildings and fields of and between the Cloud House and the Cloud Church along the La Fayette Road, received up to 1,000 wounded soldiers from various divisions. "4 As the Army moved north down the Chickamauga this hospital site became ideally situated behind the front lines. It was also along the one road that led directly to Rossville and Chattanooga. Ferdinand Gross, medical director of XIV Corps, recognized the benefit of this location and called for his reserve medical supplies to be brought forward. Before this occurred, however, Bragg's right wing took the hospital under fire. The corps medical purveyor, assistant

surgeon H.C. Barrell, had heard of the attack and ordered the supplies returned to Chattanooga. ""

As a result of the Confederate general advance on the Union left, the hospital's once ideal location caused it to become isolated from the rest of the Army early on Sunday morning. After that time it was not able to receive any additional patients. Evacuation orders were issued after a shelling of the hospital killed a wounded officer, set fire to one of the hospital tents, and caused general havoc. Gross claimed that he was able to remove most of the 1,000 patients to Rossville on foot and in ambulances or wagons. His report stated that only 60 patients and three medical officers were left behind. ""

Actually, this hospital changed hands at least five times. It was first taken by Frank Armstrong's Cavalry Division of Forrest's command at noon, Sunday. "" Shortly thereafter Gordon Granger's Reserve Corps arrived on its move south and pushed Forrest's forces back from the hospital area. "" Forrest once again claimed the hospital after Granger passed enroute to aid George Thomas. "" Philip Sheridan's Third Division, XX Corps, then regained the site at about 6:00 p.m. and held it until leaving the field. The next morning the hospital was captured by Edward Walthall's Brigade of St. John Liddell's Division. ""

Rosecrans's army lost 16,170 soldiers in the Battle of Chickamauga. Of this 1,657 were killed, 9,756 were known

wounded and 4,757 were listed as missing, some of which were wounded. ^{*1} Perin and his assistant Dallas Bache reported, respectively, that 2,500 or 2,000 of these casualties were left at hospitals or on the battlefield. The different estimates result, in part, from the confusion of evacuating the hospitals under pressure. ^{*2} Surgeon Tollman, for example, in charge of the Third Division, XIV Corps hospital at the Cloud House, stated that only 60 patients were left behind. Perin reported, however, that 1,500 wounded soldiers remained on the left wing, but not necessarily at hospitals. ^{*3} Regardless of the precise number, these casualties now came under the responsibility of Director Edward Flewellen and his medical department. This system, of course, had numerous casualties of its own.

CONFEDERATE MEDICAL SUPPORT AT CHICKAMAUGA

Samuel Stout's loss of communications with Flewellen shortly before the Battle is symbolic of the problems inherent with studying medical support of the Southern forces for which little primary source material exists. As the battle opened for Bragg's Army, Flewellen was still suffering a shortage of medical officers. In denying a request for surgeons by a receiving and shipping hospital he explained that a 'scarcity of Med. Officers in the field puts it out of my power to supply the demand.' ^{*4} As previously shown, Stout had detailed surgeons to report to the field. Not known is how many reported in time to

provide support during the actual battle. The officers detailed from Newnan surely did not as they did not depart from that hospital until 19 September. ⁶⁶

The available regimental physicians performed the standard task of providing immediate aid at the front lines while brigade surgeons supported with additional care in hospitals to the rear. In fact, one of Flewellen's surgeons is singled out for 'going repeatedly far forward under fire and among the skirmishers to attend the wounded.' ⁶⁷

Ambulances were also used in the routine way. The Army's movement orders for 18 September allowed ambulances to follow the units as they crossed the Chickamauga. ⁶⁸ They were then positioned behind the combat forces and loaded from that point. John Jackman, for instance, wrote of coming upon his brigade's ambulance to the rear. ⁶⁹ Describing the vehicle as a brigade ambulance is significant as it supports the belief that they were in too short of supply to distribute down to the regimental level. Other accounts state that some regiments did not have individual ambulances while others, admittedly, had as many as two. ⁷⁰

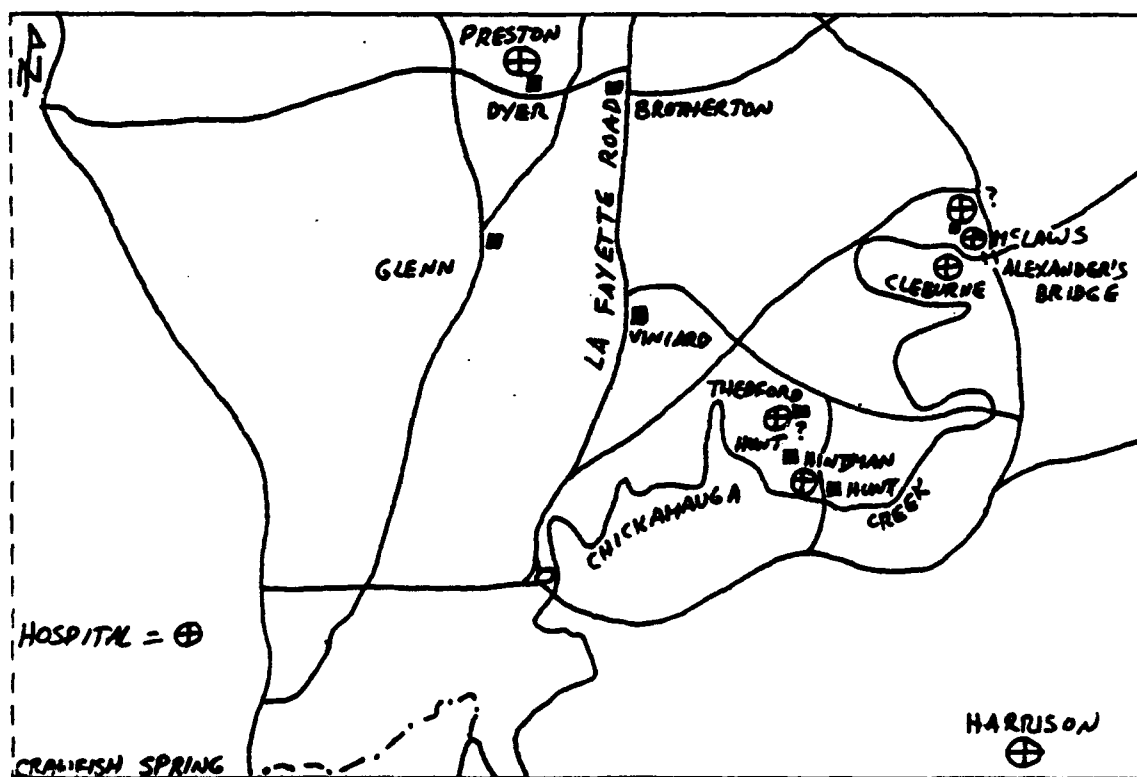
The shortage of ambulances required that evacuation to the field hospitals be by any means possible. John Hood, in command of Longstreet's Corps, was carried on a litter for the full distance to a field hospital. ⁷¹ In the Washington Artillery of Samuel Adam's Brigade the wounded were carried on the limbers and caissons. ⁷² In many other

cases, wounded soldiers simply limped, hopped, or dragged themselves off the field or were carried off by the less seriously injured. W.G. Allen, for example, suffering from six gunshot wounds, had his horse brought up and rode to the rear for aid. Elsewhere, B.J. Semmes watched as 'a soldier wounded in the arms, [led] another to the rear with both eyes shot out. I often saw wounded soldiers carrying off a worse wounded companion.' ⁷²

From the front lines the wounded were carried, or found their own way, to field hospitals in the rear. For this particular battle both brigade and division hospitals were formed. The particular reason for choosing one method of establishment over the other is not reported, however. While most available buildings were probably used as medical facilities, determining specific hospital locations must be based on the casual remarks and reports of the participants to the battle. Some of the hospitals may have been near the lines, such as the field hospital of Henry Benning's Brigade, Hood's Division. ⁷³ Other hospitals were two or more miles to the rear. ⁷⁴ Most, however, wisely took advantage of Chickamauga Creek. In W.H. Cunningham's words: 'we had plenty of good water, and that to a wounded and bleeding man is more acceptable than nectar to his lips.' ⁷⁵

Several divisions chose to establish division-level hospitals. Three separate accounts identify the fact that William Preston's Division had such a hospital. Both

Robert Bullock, of Robert Trigg's Brigade, and John Palmer, of John Kelly's, reported the division hospital as being behind or near their positions to the south of Snodgrass Hill. 76 To the southeast of these units, below the hill, was a draw that opened on the Dyer Field. When John Wilson of Trigg's Brigade was borne off the battlefield he was taken to a 'farmhouse in [thel] valley temporarily converted to a hospital.' 77 The facts, though incomplete, place Preston's division hospital at the Dyer Farm.



Map 13. Selected Confederate Field Hospitals, 19/20 September 1863.

Additionally, the chief surgeon of Lafayette McLaws's Division is reported to have placed his division hospital 'on the ridge above Alexander Bridge and opposite

hospital 'on the ridge above Alexander Bridge and opposite to Alexander's House,' while Patrick Cleburne's division hospital was 'to westward of and near Alexander's Bridge on the Chickamauga River.' 70 Finally, W.H. Cunningham spotted Hindman's 'Division Infirmary on Chickamauga Creek' at the site of Hunt's (Dalton's) Ford. 70 In fact, Kate Cumming visited Hindman's wounded at the Hunt House, 500 yards north of the ford, and identified it as being Arthur Manigault's Brigade hospital of Thomas Hindman's Division. 80 Carlyle Terry, Hindman's chief surgeon, reported only that his wounded were 'treated mostly in a stable, and most of them in rooms without fire.' 81 It is possible, therefore, that the brigades of Hindman's Division formed a division hospital in the area of both Hunt Houses.

Another mentioned hospital was that belonging to Thomas Harrison's Brigade of John Wharton's Cavalry Division. The brigade fought on the Confederate left flank across from Crawfish Spring. Elder Womak's account placed the hospital in a log house two or three miles to the rear of his unit. Since his unit did not cross the Chickamauga until Sunday its hospital was probably one of those found two to three miles east of the Creek. 82

Hospitals of unspecified size were established at the Alexander and Thedford Houses. The 'wounded of the [1st Tennessee] regiment were carefully gathered up and carried to Dr. Buist's field hospital in the rear, at the Alexander

House." ²³ To the south lived Mrs. Thedford, "a Southern heroine who made her house a hospital and fearlessly ministered to many a soul shot in battle." ²⁴

Bragg's losses were much higher than Rosecrans's. Livermore puts the Southern casualties at 18,454: 2,312 soldiers killed, 14,674 wounded, and 1,468 missing. ²⁵ Additionally, there were about 2,500 Union wounded to care for. Clearly, where ever the Army's hospitals were located, they were kept extremely busy. Following the two days of fighting, Cleburne's division hospital, alone, reportedly held over 1,200 wounded soldiers. ²⁶

Because of the great number of patients and shortage of medical officers in the field, medical director Flewellen had but one option. He had to evacuate as many patients as possible to the general hospitals, and he had to move them before the shortage of physicians or the increasingly cold autumn weather took their toll. As soon as the first day after the Battle, Monday, 21 September, the evacuations started. A Union signal station noticed on that Monday that "covered wagons or ambulances can be seen on the road toward Ringgold" ²⁷ In the same vein, surgeon Perin, of Rosecrans's army, was having to make arrangements for the wounded the Federals took off the field.

ENDNOTES

CHAPTER 5

1. OR 30/1: Rosecrans's Battle Report, [Oct. 1863], 53-6; OR 30/1: Thomas's Battle Report, 30 Sept. 1863, 247-9; OR 30/1: McCook's Battle Report, 2 Oct. 1863, 486-7; OR 30/1: Crittenden's Battle Report, 1 Oct. 1863, 603-6.
2. OR 30/2: Circular (Battle Orders), Brent to Field Commanders, 18 Sept. 1863, qtd. in Battle Report, Bragg to Cooper, 28 Dec. 1863, 31.
3. OR 30/2: Johnson's Battle Report, 24 Oct. 1863, 452-3.
4. OR 30/2: Walker's Battle Report, 18 Oct. 1863, 239.
5. OR 30/1: Brannan's Battle Report, 29 Sept. 1863, 400; Both Rosecrans's (30/1: 56) and Thomas's (30/1: 249) battle reports state 10:00 a.m.
6. OR 30/1: Rosecrans's Battle Report, [Oct. 1863] 59; OR 30/2: Johnson's Battle Report, 24 Oct. 1863, 457.
7. OR 30/1: Granger's Battle Report, 30 Sept. 1863, 855.
8. OR 30/1: Thomas's Battle Report, 30 Sept. 1863, 255.
9. Three of the many secondary source presentations of this battle are in: Timothy Donovan, Roy Flint, Arthur Grant, and Gerald Stadler, The American Civil War (West Point, NY: Avery, 1986); Tucker, Chickamauga; Van Horne History.
10. Constantin Grebner, We Were the Ninth, trans., ed. Frederic Trautmann (Kent, OH: Kent State University, 1987) 150-2.
11. MSH 1/APP: 279.
12. Sunset for this period was around 6:00 p.m.
13. MSH 1/APP: 267, 288.
14. MSH 1/APP: 267.
15. Duncan 'Medical' 370-1; Gillett, Army 221; Adams, Doctors 94.
16. MSH 1/APP: 275.
17. James Flake, Examination Papers, 7 May 1863, Box 2G424, Stout Papers, University of Texas, Austin, TX; similar

responses are found throughout this collection of examination papers.

18. OR 30/1: Telegram, Dana to Halleck, 24 Sept. 1863, 200.

19. OR 30/3: Messages, Crittenden to Garfield, 12 Sept. 1863, 575-6.

20. MSH 1/APP: 288.

21. United States, Department of the Army, Field Manual 8-55, Operations (Washington: GPO, 1986) 115; United States, Department of the Army, Field Manual 101-5-1, Operational Terms and Symbols (Washington: GPO, 1985) 46; ch. 1.

22. MSH 1/APP: 279.

23. MSH 1/APP: 267, 269, 288.

24. MSH 1/APP: 269, 271, 272, 273, 274, 275, 276, 277, 279, 280.

25. MSH 1/APP: 269, 271.

26. MSH 1/APP: 269, 273.

27. Author Louis Duncan, however, and subsequent researchers incorrectly place the Second Division, XX Corps hospital at the Cloud House, with the First Division hospital, XIV Corps. [A] Charles Schussler, the chief surgeon of the division, reported that the hospital's initial site "was distant [from the division] nearly a mile on the left side of the Chattanooga [La Fayette] road." This would place him along a line from the Brotherton House to the Alexander Bridge Road-La Fayette Road intersection.

Next, he reported that on the morning of the 20th "arrangements were made to amputate in a log house near by." This would not have been necessary if he was already located at the Cloud House. Moreover, before the operations could begin, Schussler's hospital was cut off from the rest of the Army by "Louisiana troops." [B] The Second Division was fighting on Rosecrans's left flank with Thomas. Around 10:30 on Sunday morning, Adams's Brigade of Breckinridge's Division, with five regiments and one battalion of Louisiana troops and an Alabama regiment rolled around the left flank and advanced from the Mullis Road-La Fayette Road juncture to the northern edge of the Kelly Field, on the west side of the La Fayette Road. [C] The Cloud House, on the other hand, was attacked by Armstrong's Brigade of Kentucky, Arkansas, and Tennessee soldiers. [D]

Finally, Schussler was freed by skirmishers of Granger's Reserve Corps. At this point one of Granger's officers recommended that Schussler move the wounded 'a thousand yards to the rear, where there was a house and temporary hospital.' The Cloud House was about 1000 yards on a line to the rear of Granger's advance southward. [E]

Other, though indirect, evidence of the placement of the Second Division's hospital is found in Thomas Wood's battle report for the First Division, XXI Corps, and an examination of the local road network. Attached to Wood's report is a sketch map of the battlefield. The map shows an unnamed hospital located a little more than a mile north of the Dyer House. [F] The Mullis House was a mile and a quarter north of the Dyer's. The road network also supports the area of the Mullis House and Field. The Second Division entered the battle by marching east from the Kelly House and establishing its initial lines at the intersection of Jay's Mill and Alexander's Bridge Roads. [G] The logical route of evacuation would have been by these roads. To prevent backtracking his wagons and obstructing the movements of follow-on units, Schussler would have placed his hospital near the mouth of the nearest road not in the line of march. This was the Alexander Bridge Road.

Completing the indirect evidence discounting The Cloud House as the site of the Second Division, XX Corps hospital are the official reports. The battle report of the chief surgeon known to be at the Cloud House, Moody Tollman of Third Division, XIV Corps, makes no mention of a co-located division hospital. Neither does Schussler mention being in the proximity of another hospital. [H]

[A] Duncan, 'Chickamauga' 360.

[B] MSH 1/APP: 276.

[C] OR 30/2: Various Battle Reports From Commanders of the Louisiana Units, 24-26 Sept. 1863, 216-30; United States, Congress, House, Atlas of Chickamauga, Chattanooga, and Vicinity, 56th Cong., 2nd sess., Vol. 101, Number 514, (Washington: GPO, 1900-1901) Plate 6; J.A. Chalaron, 'Vivid Experiences at Chickamauga,' Confederate Veteran 3 (1895): 278.

[D] OR 30/2: Forrest's Battle Report, 22 Oct. 1863, 525; United States, Atlas of Chickamauga Plate 7.

[E] MSH 1/APP: 276.

[F] OR 30/1: Wood's Battle Report, 29 Sept. 1863, 644.

[G] United States, Atlas of Chickamauga Plate 3, Plate 4.

[H] MSH 1/APP: 273, 276.

28. William Graham, "An Account of My Capture at the Battle of Chickamauga, Tenn., Sept. 20th. 1863," n.d., Indiana Historical Society, Indianapolis, IN.

29. D.B. McConnell, qtd. in Henry Boynton, ed., Dedication of the Chickamauga and Chattanooga National Military Park, September 18-20, 1895 (Washington: GPO, 1896) 273; MSH 1/APP: 279.

30. (Ambulances) Lyman Bennett and William Haigh, History of the Thirty-Sixth Regiment Illinois Volunteers. During the War of the Rebellion (Aurora, IL: Knickerbocker & Hooper, 1876) 471. (Musicians) William Patterson, Diary Entry, 19 Sept. 1863, Patterson Papers, Illinois State Historical Library, Springfield, IL; Bennett, History 491; MSH 1/APP: 279.

31. Chickamauga, Campaign 5.

32. Bennett, History 491.

33. MSH 1/APP: 273, 279, 280.

34. OR 30/1: Telegram, Dana to Halleck, 19 Sept. 1863; MSH 1/APP: 267; Michael Fitch, Echoes of the Civil War As I Hear Them (New York: P.F. Fenno, 1905) 146.

35. Smith, Private Smith's Journal. Recollections of the Late War ed. Clyde Walton (Chicago: Donnelley, 1963) 90.

36. Bennett, History 491.

37. Schussler reports going out after the wounded as late at 3:00 a.m. Sunday Morning; MSH 1/APP: 276.

38. Alva Greist, Diary Entry, 19 Sept. 1863, Greist Diary, 72nd Indiana Regimental file, Chickamauga-Chattanooga National Military Park, Fort Oglethorpe, GA; McGee, History 189-90; this relates the "pitiful plea for help, and the cry for water."

39. John Ely, Diary Entry, 20 Sept. 1863, Ely Diary, 36th Illinois Regimental file, Chickamauga-Chattanooga National Military Park, Fort Oglethorpe, GA.

40. John Gordon, Reminiscences of the Civil War (New York: Scribner's and Sons, 1904) 205.

41. John Patterson, Diary Entry, 19 Sept. 1863, Patterson Papers, Illinois State Historical Library, Springfield, IL;

William Records, Diary Entry, 19 Sept. 1863, Records Papers, Manuscript Collection, Indiana Division, Indiana State Library; McGee, History 180-1, 183; Henry Campbell, "Union Bugler Found Chickamauga 'Terrible Battle'," Civil War Times Illustrated 3.2 (1964): 37.

42. OR 30/1: Orders, Garfield to Mitchell, 19 Sept. 1863, 68.

43. MSH 1/APP: 278; The chief surgeons for XIV and XX Corps attempted to move to the Spring but were turned back by Confederate skirmishers, MSH 1/APP: 270.

44. Joseph Woods, Personal Letter, n.d., Woods Papers, Duke University, Durham, NC; Albert Hart, Letter to His Wife, 28 Sept. 1863, Hart Papers, Western Reserve Historical Society, Cleveland, OH.

45. John Wyeth, With Sword and Scalpel (New York: Harper & Brothers, 1914) 252.

46. MSH 1/APP: 275, 277, 278.

47. E.H. Bowman, Personal Letter to Rosecrans, 28 June 1862, Rosecrans Papers, University of California, Los Angeles, CA.

48. OR 30/1: Wilder's Battle Report, 10 Nov. 1863, 449; OR 30/1: Mitchell's Battle Report, 3 Oct. 1863, 894; OR 30/3: Message, Wilder to Goddard, 20 Sept. 1863, 751; Smith Atkins, "Crushing McCook's Corps at Chickamauga," Confederate Veteran 12 (1904): 483.

49. Bennett, History 472.

50. MSH 1/APP: 278.

51. William Graham, "An Account of My Capture at the Battle of Chickamauga [sic], Tenn., Sept. 20th. 1863," Indiana Historical Society, Indianapolis, IN.

52. MSH 1/APP: 271.

53. MSH 1/APP: 276.

54. Charles Anderson, "Gracey-Chickamauga-Whitaker," Confederate Veteran 3 (1895): 251.

55. MSH 1/APP: 270.

56. MSH 1/APP: 273; The wounded officer was Lieutenant Colonel Rockingham, a close friend of Whitaker, who later

freed the hospital of Confederates, OR 30/1: Whitaker's Battle Report, 28 Sept. 1863, 862.

57. OR 30/2: Forrest's Battle Report, 22 Oct. 1863, 525; United States, Atlas of Chickamauga Plate 7.

58. OR 30/2: Forrest's Battle Report, 22 Oct. 1863, 525; OR 30/1: Whitaker's Battle Report, 28 Sept. 1863, 862.

59. OR 30/2: Forrest's Battle Report, 22 Oct. 1863, 525.

60. Philip Sheridan, Personal Memoirs of P.H. Sheridan 2 vols. (New York: Charles Webster, 1888) 1:284; Smith, 'Walthall's Brigade at Chickamauga,' Confederate Veteran 12 (1904): 403.

61. OR 30/1: Revised Casualty Report, n.d., 179; Thomas Livermore, Numbers and Losses in the Civil War in America (Boston: Houghton, Mifflin and Company, 1900) 105; The reports of losses vary from author to author. Livermore is useful as he documents his numbers from the original reports. He also explains the Civil War era use of such terms as present for duty, present for duty equipped, and effective strength.

62. MSH 1/APP: 267, 288; Dana uses Perin's count of 2,500, OR 30/1: Telegram, Dana to Halleck, 3 Oct. 1863, 205; Bragg reports that 2,000 wounded were left in his possession, OR 30/2: Message, Bragg to Cooper, 24 Sept. 1863, 23.

63. MSH 1/APP: 273, 267.

64. Letter, Flewellen to Ramsey, 29 Sept. 1863, Stout Papers, Southern Historical Collection, University of North Carolina, Chapel Hill, NC.

65. Harwell, Kate 143.

66. OR 30/2: Cleburne's Battle Report, 18 Oct. 1863, 158.

67. OR 30/4: Circular, Headquarters to Major Subordinate Commands, 18 Sept. 1863, 663.

68. John Jackman, Diary Entry, 20 Sept. 1863, Jackman Journal, Manuscript Division, Library of Congress, Washington, DC.

69. Jones, Medical History 127; W.H. Cunningham, Letter to His Father, 27 Sept. 1863, Cunningham Letters, Confederate Veteran Papers, Duke University, Durham, NC.

70. Howell Carter, A Cavalryman's Reminiscences of the Civil War (New Orleans: American Printing, n.d.) 90.
71. Chalaron, 'Vivid' 24.
72. Allen, 'Severe' 87; B.J. Semmes, 'Chickamauga Reminiscences,' Confederate Veteran 3 (1895): 293.
73. Tucker's version of the battle tells that the hospital was close enough to be accidentally fired on by Union artillery, Tucker, Chickamauga 171.
74. Elder Womak, 'Chickamauga as I Saw It,' Confederate Veteran 25 (1917): 74
75. W.H. Cunningham, Letter, 27 Sept. 1863, Cunningham Letters, Confederate Veteran Papers, Duke University, Durham, NC.
76. OR 30/2: Bullock's Battle Report, 25 Sept. 1863, 437; OR 30/2: Palmer's Battle Report, 25 Sept. 1863, 446.
77. J.B. Tutwiler, 'Lieutenant John Wilson on Snodgrass Hill,' Confederate Veteran 21 (1913): 62; George Dolton, 'Chickamauga Battlefield--Snodgrass Ridge,' Confederate Veteran 1 (1893): 362-3.
78. Without knowing the author's meaning of the word 'opposite' the McLaw hospital can only be placed on high ground in the vicinity of where the Alexander House stood. Unidentified fragment, Ticktin Papers, North Carolina Division of Archives and History, Raleigh, NC; John Dismukes, 'Some Personal Experiences and Recollections of the Past,' The Southern Practitioner, 24 (1902): 491.
79. W.H. Cunningham, Letter, 27 Sept. 1863, Cunningham Letters, Confederate Veteran Papers, Duke University, Durham, NC; In mid-afternoon of 19 September the Division had crossed the Creek at Hunt's (Dalton's) Ford. Hindman's hospital, therefore, was probably in the area of this crossing site, OR 30/2: Hindman's Battle Report, 25 Oct. 1863, 302.
80. Harwell, Kate 150.
81. Carlyle Terry, 'Report of Wounded Treated in Field Hospital of Hindman's Division, Army of Tennessee, After the Battle of Chickamauga,' Confederate States Medical and Surgical Journal 1 (1864): 75.
82. Womak, 'Chickamauga' 74.

83. Anonymous, "A Brother's Tribute," Confederate Veteran 14 (1906): 566; Doctor Buist was the chief surgeon for George Maney's Brigade, Benjamin Cheatham's Division, Jones, "Roster" 178.

84. B.L. Ridley, "Southern Side at Chickamauga," Confederate Veteran 6 (1898): 409; Mrs. Thedford had two sons serving in Longstreet's Corps in Virginia. Unknown to her, both came to Chickamauga as part of the reinforcements sent by Lee. The first Mrs. Thedford knew of this was when both sons were wounded and carried into her house.

85. Livermore, Numbers 106.

86. Harwell, Kate 150.

87. OR 30/3, Message, Jones to Seiter, 21 Sept. 1863, 762.

CHAPTER 6

MEDICAL SUPPORT FOLLOWING THE BATTLE

UNION ACTIONS UPON ENTERING CHATTANOOGA

The Army of the Cumberland retreated from the battlefield with about 7,200 of its 9,756 wounded. 'Great numbers' of the walking wounded crossed the Tennessee and headed west for the large field hospital at Stevenson. ¹ The more serious cases, however, fell to Surgeon Moses and the two-day-old hospital system he had established in Chattanooga. Nearly 4,000 casualties were evacuated during and after the battle who were serious enough to require immediate hospitalization and care. ²

The night of 20 September was spent finding room for all the wounded and treating their injuries. Many were served their first food in two days. ³ The long lines of casualties, however, quickly overwhelmed the capacity of the city's few hospitals. As a result, other buildings were soon pressed into medical service (Figure 6). ⁴ Meanwhile, the 1st Michigan Engineers and Mechanics continued to build 'bunks' for the patients while each corps provided twenty volunteers, with upholstery and tailor skills, to convert 200 bales of cotton into 'mattresses for the sick and

wounded of this army.' " In the opinion of at least one medical officer 'Chattanooga [had become] nothing but a large hospital.' "

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| Hosp. 1: Confederate hospital buildings on Cameron Hill, |
| Hosp. 2: Receiving hospital at the base of the Hill, |
| Hosp. 3: Crutchfield Hotel, |
| Hosp. 4: Three churches, |
| Hosp. 5: Lofts over commissary storehouse buildings, |
| Hosp. 6: Buildings opposite commissary storehouses, |
| Hosp. 7: Officer hospital in a large brick building, |
| Hosp. 8: Officer hospital in a large private mansion, |
| Hosp. 9: Private houses. |

Fig. 7. Union Hospitals in Chattanooga, 21 September 1863.

This medical support situation was not acceptable to Perin or his physicians. First, housing the wounded among so many hospital buildings also spread thin the remaining surgeons. With 52 medical officers left on the battlefield only 43 were available to provide care in Chattanooga. 7 It was clear that some consolidation of patients would have to occur. Second, Bragg's intentions relative to the Army of the Cumberland and Chattanooga were still unclear. If he decided to attack, and was successful, the medical staff and their patients would have to compete with the front line troops for access to the single pontoon bridge across the Tennessee. Third, access to the rail line from Chattanooga to the field hospital at Stevenson, and then to the general hospitals in the north, was cut by Bragg. The only route of evacuation was to cross the River and move by the north bank

to Bridgeport and its railhead. Finally, a siege by Bragg would, as a consequence, reduce the available rations to the Army. The patients in this situation would suffer further, not recover from their wounds as quickly, and be a greater burden to the command. * Perin's response to this scenario was threefold. He relocated the hospitals, evacuated as many of the patients as possible, and requested more physicians.

The first step was to relocate the hospitals. By Tuesday, 22 September, a single consolidated tent hospital was established at Stringer's Spring. The spring was two miles north of the town in a 'pleasant little valley with plenty of good spring water.' * The hospital was built using all available tents and pavilions, with 'bowers of branches and leaves.' It had capacity for about two thousand of the wounded. This facility received all transportable patients from the hospitals in town. Also brought here were those wounded who fell exhausted on the side of the road while trying to walk to Stevenson. ¹⁰ The Stringer's Spring hospital had an immediate effect on overcrowding in Chattanooga. As evidence, Moses's morning report for 23 September shows only seven hospitals still in operation with a total census of just 886 patients. ¹¹

From this facility the transportable wounded were moved to Bridgeport and its railhead. ¹² Evacuation to Bridgeport or Stevenson was primarily in empty supply wagons

using backhaul techniques. The route followed was a rough, mountainous road on the north bank of the Tennessee since the Confederates had control of the south bank. To cover the road distance of 60 miles the wagons required at least four days. ¹³ Such a supply train, supplemented with ambulances, started the trip on the morning of 4 October. Each of the wounded was provided with two crackers which had to last them until corn was made available on 6 October. The train arrived at Stevenson on the 7th. One of the wounded later wrote, of a similar evacuation, that these "were days and nights of the most fearful and causeless suffering, hardship and privation that I ever endured in my life We reached Stevenson . . . at last, starved, wearied, jolted and used up generally" still, after a 24 hour train ride, these same patients were well cared for in a Nashville hospital bed. ¹⁴

Meanwhile, the quality of medical care available in Chattanooga, though improved, still suffered from too many patients and too few physicians. As late as 30 September Perin still had as many as 6,100 wounded in hospitals around town. ¹⁵ His loss of 52 medical officers had only been partially solved. Two doctors had reported from Nashville, eight were enroute from St. Louis, and four had been paroled by Bragg. At least 30 more were thought to be necessary to

adequately fill the ranks of the medical department. ¹⁶

And, to further dilute the physician-patient ratio, Bragg had accepted the Union request to parole the wounded.

The question of recovering the wounded left on the battlefield was first raised on Monday, 21 September. Perin sent Rosecrans a request asking that a truce flag be sent with the intent of collecting the Union wounded. ¹⁷ Though Rosecrans was in agreement, he cancelled and did not send his initial message to 'General J. Johnson a commander of Confederate forces at Chickamauga Valley.' The reason is not explained in the Official Records. The message had asked for permission to send the Army's ambulances to gather the wounded as 'our badly wounded will probably be a burden on your hands and we are anxious to provide for their comfort.' ¹⁸ The Union's first attempt at collecting the wounded occurred on 26 September with a message from Rosecrans to Bragg. In this request Rosecrans proposed sending ambulances to carry away those wounded that could be moved and provide 'medical supplies as may be necessary for the comfort of those who remain.' Bragg approved the request and the respective Army staffs made arrangements for the movement of the wounded. ¹⁹

The procedure for collecting the wounded called for Union ambulances, loaded with doctors and medical supplies, to be brought to a Confederate staff officer at the picket lines. The Confederate staff officer then took charge and,

with Confederate drivers replacing the Union ones, moved the ambulances and their cargo to the hospitals. Here the physicians distributed crackers and coffee and examined the wounded with "all manner of tests to discover how badly we were injured." ²⁰

Testing the patients seems to have been a precaution of the Union physicians and not a requirement of Confederate leaders. Confederate surgeon Flewellen was clearly "anxious that every one of the Federal wounded whose life will not be positively jeopardized by the transportation shall be sent to Chattanooga." For this reason Bragg allowed the Union physicians to choose which patients would be accepted and which had to stay behind. ²¹ Once the selection was made the patients were required to sign parole papers before being loaded onto the ambulances. Ambulances and wounded then made a difficult six-hour move to the picket line where drivers were again exchanged. The ambulance train then made its way to Chattanooga. ²²

The ambulance trains made three forays into Bragg's camp for the wounded. 250 patients were brought out on 29 September, 800 were recovered on 1 October, and another 700 were received on the 2nd. ²³ Available documents do not tell of the fate that fell to the remaining 750 Union wounded. Many of the critical cases probably died while most of the less seriously injured recovered sufficiently for transfer to a Confederate prison. ²⁴ The Union's

recovery of its wounded was also considered an exchange of wounded prisoners. Rosecrans, therefore, returned the Confederate patients he held, who amounted to just fifty soldiers. ²⁵

Returning to the Union lines and a Union hospital did not necessarily mean a return to complete medical care for the wounded. Unfortunately, triage was an issue again forced upon the surgeons due to a shortage of physicians, medical supplies, and treatment facilities. As seen on the battlefield, medical officers had to choose between those that would benefit from the limited care available and those considered too critical for care. It was unfortunate, but a reality of the situation, that "the critically wounded (those given up for lost) must be put on camp-beds in the hospital's vestibule, to make room, in the wards, for those thought still to have a chance." ²⁶

And yet, the medical department of the Army of the Cumberland continued to serve in its role of supporting the Chickamauga Campaign. From early October to the 23 November breakout from Chattanooga, medical director Perin and his staff arranged for the evacuation of patients from the town as transportation was made available. As a result, only 200 of the Chickamauga wounded remained in the Army's hospitals at the time of the Battle for Chattanooga. ²⁷ Similar evacuations were also being pursued by Flewellen and the medical department of Bragg's Army.

CONFEDERATE ACTIONS FOLLOWING THE BATTLE

With 14,674 of his own wounded soldiers, and 2,500 of the enemy's, Flewellen's attention was turned toward the rapid emptying of the field hospitals. His plan was simple enough: patients were to be evacuated to nearby railheads, loaded onto railcars, and transported to Stout's hospitals in the rear. ²⁰ The execution of that plan, however, would prove to be difficult.

Flewellen's lack of ambulances necessitated the use of supply wagons to backhaul the wounded to the nearest commissary depots, as the depots were the destination of the wagons. ²⁰ For the first three days following the battle, therefore, the wounded were sent to meet the railroad at Tunnel Hill, 12 miles to the southeast, or to Dalton, 2 miles beyond Tunnel Hill. Then, as the destroyed railroad bridges were repaired and the depots were moved closer to Chattanooga, the wounded were evacuated first to Catoosa Station, and finally to Ringgold. ²⁰

The wounded faced several challenges in reaching the general hospitals. First, evacuation in cargo wagons over dirt roads with deep ruts caused by the sudden late-September rains was hard on these soldiers. Kate Cumming remembered wondered how the wounded 'could live after such a ride, for it was really harrowing.' Logan summarized the evacuation as being 'over rough roads in rough vehicles for many miles.' ²¹ Second, there was a break in the continuity

of care at the depots where the commissary personnel unloaded the wounded. The Army was responsible for evacuating the wounded to the general hospitals. ³² During the days immediately after the battle, however, no provisions were made to move the wounded once they arrived at the commissary depots. As when he moved the general hospitals, Stout claimed an absence of support from the quartermaster staff of Bragg's Army.

The situation resulted in William Burt, Stout's surgeon in charge of the wounded at Tunnel Hill, having to coordinate with railroad engineers for room on the trains while he also caring for the soldiers. ³³ Stout, himself, went forward to evaluate the Army's needs. He later contended that the Army showed no concern for evacuating its soldiers until at least 27 September. 'Prior to this cars had been obtained by my own exertions and those of my subordinates chiefly.' ³⁴ Finally, a messenger sent by the quartermaster to Stout. When the messenger reached Catoosa Spring and asked for medical guidance Stout claimed he responded that 'as chief quartermaster of the army he ought to know without asking, that when there are wounded soldiers to be transported the chief quartermaster ought to provide a subordinate of his to attend that transportation.' ³⁵

Finally, a scheme of evacuation began to take shape. Hospitals for receiving and then distributing the soldiers were set up at Chickamauga Station, Ringgold, and Dalton.

From these shipping hospitals up to 700 wounded were taken daily, by scheduled day and mail trains, to the general hospitals. An equal number were sent via irregular backhaul on troop transport trains. ³⁶

On board the scheduled trains were medical officers to care for the patients and ensure they arrived at their proper destination. On one train, for example, 160 patients were picked up at Chickamauga Station and delivered to the general hospitals in Ringgold, Dalton, Kingston, Cassville, Rome, Marietta, and Atlanta. ³⁷

Once developed, this system succeeded in quickly moving the wounded to Stout's general hospitals. Burt, who had sent as many as 800 wounded from Tunnel Hill in a day, had only 200 patients for the 27th and expected no more after the 29th. ³⁸ In fact, Flewellen claimed that by 29 September 'as nearly, if not quite, all who will for some time bear transportation [had] been sent forward'. ³⁹ And, in the next day's paper, the Atlanta Appeal reported that only 2,500 Confederate wounded were still on the field. These were the wounded that were too seriously injured to be immediately evacuated. ⁴⁰

All of these soldiers went into Stout's network of general hospitals, which extended beyond Atlanta and had soon treated over 13,000 patients. ⁴¹ Accomplishing this feat was made possible by procedures and policies mandated by the situation. Specifically, as many of the wounded as

possible were treated away from the hospitals in order to optimize the 7,500 beds that were available. Malingerers or 'hospital rats' were returned to their commands while the less seriously injured were sent to convalescent camps or on furlough. Many other patients were cared for by families who lived near the hospitals. The remaining patients, those which required a hospital bed and daily medical care, were cared for in the Department of Tennessee's hospitals or sent to medical facilities in other military departments. ⁴²

The Confederate wounded from Chickamauga, amounting to over 20 percent of Bragg's Army, ultimately received care despite the initial coordination and communication problems encountered among Flewellen, Stout, and Army staff officers. In fact, by 10 October as few as 500 wounded men still lay in battlefield hospitals. And, by the end of the month the Army was able to close all brigade and division hospitals in favor of a return to duty or evacuate policy. ⁴³

SUMMARY

The aftermath of the Battle of Chickamauga required that medical directors of both the Union and Confederate Armies provide for the recovery, treatment, and evacuation of their command's wounded. Yet, in both cases, numerous problems were encountered with the accomplishment of those tasks. Clearly, surgeons Perin and Flewellen had developed systems and planned medical support to provide care during the battle. Neither, however, seemed to have adequately or

fully considered their Army's medical needs beyond the firing of the guns. As a result, needless deaths occurred in both camps until lessons and experiences of prior battles and campaigns were recalled and applied to the critical needs of the situation at hand.

ENDNOTES

CHAPTER 6

1. MSH 1/APP: 267.
2. MSH 1/APP: 282.
3. Bennett, History 476.
4. MSH 1/APP: 282.
5. Fox qtd. in Boynton, Dedication 305; OR 30/3: Message, McMichael to Thomas, 29 Sept. 1863, 930.
6. Grebner, We Were 152.
7. MSH 1/APP: 282; Four of the medical officers were Confederate.
8. MSH 1/APP: 267, 288.
9. John Russell, Personal Letter, n. pag., Civil War Times Illustrated Collection, U.S. Army Military History Institute, Carlisle Barracks, PA.
10. MSH 1/APP: 267, 277, 288.
11. Morning Report, 23 Sept. 1863, Department of the Cumberland, Letters Sent, November 1862-June 1865, Record Group 393, Entry 908, National Archives, Washington, D.C.
12. MSH 1/APP: 267.
13. MSH 1/APP: 267; Albert Hart, Papers, Western Preserve Historical Society; OR 30/3: Message, Goddard to Sweet, Message, Goddard to Ravenscroft, 21 Sept. 1863, 771. Eventually the Confederate presence on the south bank would force the supply and ambulance trains to detour over the mountainous terrain of Walden's Ridge and down into the Sequatchie Valley. In addition to the damaging effect of the terrain on the wounded's physical condition, the duration of the trip was nearly doubled, MSH 1/APP: 288-9.
14. William Blair, Letter to Wife, 30 Sept. 1863, Blair Papers, Indiana Historical Society; Dryden qtd. in Bennett, History 493; William Patterson, Diary Entries, 20 Sept. to 1 Oct. 1863, Patterson Papers, Illinois State Historical Library, Springfield, IL.
15. OR 30/1: Telegram, Dana to Stanton, 30 Sept. 1863, 204; Dana reported that 4,000 wounded had already been sent to

Bridgeport. This may be a bit high but does show the speed with which the wounded were moved, OR 30/1: Telegram, Dana to Stanton, 22 Sept. 1863, 196.

16. Headquarters to Thruston, 18 Sept. 1863, Department of the Cumberland, Telegrams Sent, Record Group 393, Entry 916, National Archives, Washington, DC; MSH 1/APP: 288; OR 30/1: Telegram, Dana to Stanton, 3 Oct. 1863; The remaining 48 surgeons were paroled after reporting to the post commandant of Atlanta, Department of the Cumberland, Letters Received, 1862-1865, Herrick to Gross, 29 Sept. 1865. Record Group 393, Entry 925. National Archives, Washington, D.C.; OR 30/1: Telegram, Dana to Stanton, 3 Oct. 1863, 205.

17. OR 30/1: Message, Perin to Rosecrans, 21 Sept. 1863, 143.

18. Rosecrans to Johnson, 21 Sept. 1863, marked: Not Sent--Cancelled, Department of the Cumberland, Letters Sent, Record Group 393, Entry 908, National Archives, Washington, DC.

19. OR 30/3: Letter, Rosecrans to Bragg, 26 Sept. 1863, 872; OR 30/1: Telegram, Dana to Stanton, 28 Sept. 1863, 203.

20. Dryden qtd. in Bennett, History 491-2.

21. Flewellen to Mattingly and Herbert, 28 Sept. 1863, Army of the Tennessee, Medical Director, Letters Sent, Record Group 109, Vol. 749, Chapter 6, National Archives, Washington, DC.

22. Bennett, History 490-5; Grebner, We Were 158; John Kane, From Chickamauga to Chattanooga. The Battlefield Account of Sergeant John M. Kane ed. Joseph Suppiger (NP: East Tennessee Historical Society, ND) N. pag.; OR 30/3: Message, Garfield to McKibbin, 27 Sept. 1863, 893; OR 30/3: Orders, McMichael to Thomas, 29 Sept. 1863, 930.

23. (250 wounded), MSH 1/APP: 282; (800 wounded), Robert Walker, 'A Union Soldier's Diary [The Diary of L.W. Mann], Chattanooga Times 25 Apr. 1937, N. pag.; (700 wounded), OR 30/4: Telegram, Meigs to Stanton, 3 Oct. 1863, 58.

24. Campbell qtd. in Bennett, History 496.

25. MSH 1/APP: 288; On 1 October Bragg requested that Rosecrans release non-wounded Confederate prisoners in a one-to-one ratio to the paroled Union wounded. This request was quickly denied by Rosecrans, OR 30/4: Message, Rosecrans to Bragg, 2 Oct. 1863, 32.

26. Grebner, We Were 158.
27. MSH 1/APP: 283.
28. Baird qtd. in Cunningham, Doctors 283.
29. Stout, "Outline" 71-2.
30. Stout qtd. in Cunningham, Doctors 279.
31. Harwell, Kate 156; Letter, Logan to Stout, 24 Oct. 1863, Stout Papers, University of North Carolina, Chapel Hill, NC.
32. Stout, "Outline" 72.
33. Letter, Burt to Stout, 22 Sept. 1863, Stout Papers, Emory University, Atlanta, GA.
34. Stout Endorsement qtd. in Message, M.B. McMicken to Gribble, 2 Sept. 1863, McMicken Directives, Medical Service File, Combat Studies Institute, Fort Leavenworth, KS.
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36. (Hospitals), OR 30/4: Report, Stout to Moore, 11 Oct. 1863, 737; (Trains), Dennis qtd. in Cunningham, Doctors 282.
37. Report, Patterson to Stout, 2 Oct. 1863, Box 2G426, Stout Papers, University of Texas, Austin, TX.
38. Letter, Burt to Stout, 22 Sept. 1863, Stout Papers, Emory University, Atlanta, GA; Status Report, Burt to Stout, 27 Sept. 1863, Stout Papers, Duke University, Durham, NC.
39. Letter, Flewellen to Ramsey, 29 Sept. 1863, Stout Papers, University of North Carolina, Chapel Hill, NC.
40. OR 30/1: Telegram, Dana to Stanton, 3 Oct. 1863, 206.
41. Monthly Hospital Report, Sept. 1863, Box 2G426, Stout Papers, University of Texas, Austin, TX.
42. Circular 9, [Housing the Wounded With Private Families,] Stout to Surgeons in Charge of Hospitals, 29 Sept. 1863, Stout Papers, Box 2G432, University of Texas, Austin, TX; Cunningham, Doctors 280; OR 30/4: Public Release, Stout to the Public, 5 Oct. 1863, 738.

43. Cunningham, Doctors 280; Orders, Flewellen to Corps Medical Directors, 30 Oct. 1863, Army of the Tennessee. Medical Director, Letters Sent, Record Group 109, Vol. 749, Chapter 6, National Archives, Washington, DC.

CHAPTER 7

CONCLUSIONS AND IMPLICATIONS

"ALL HONOR AND GLORY TO THE DEAD!
ALL SYMPATHY AND COMPASSION FOR THE WOUNDED!" ¹

The commanders of both Armies were generous with praise for their medical departments. Rosecrans reported that "our medical corps proved very efficient during the whole campaign, and especially during and subsequent to the battle. A full share of praise is due to Dr. Glover Perin" Bragg insisted that "the medical officers, both in the field and in the hospitals, earned the lasting gratitude of the soldier and deserve the highest commendation." ²

Certainly an amount of praise was well earned. On both sides of the Chickamauga medical planning was occurring as the combatants maneuvered for position and an engagement. Then, when the fighting did begin, prompt medical support was provided to the wounded. And, while soldiers slept in the cold after the first day's fighting, litter bearers and surgeons worked long into the night finding, moving, and caring for their men and prisoners. All of this occurred on most difficult terrain in a land long void of much needed rain. Additionally, hospitals were fired upon, medical officers were wounded, and each commander's intentions were never really understood.

There are those, on the other hand, who highlighted the medical failures of the battle. A Union regimental commander reported that, on the 20th, "neither surgeons, hospital corps, nor ambulances were to be found." In the Confederate Army the shortage of food and supplies and the distances to the nearest railroad "seemed to daze Dr. Flewellen," who was reported to be "watching General Bragg look at the army." ³ At the very least, one has to wonder about the placement of the Union hospitals and the movement of the Confederate wounded from the commissary depots.

IMPLICATIONS

Whatever one's assessment of its quality, the medical support provided to the Armies of the Battle of Chickamauga provides a wealth of observations that can be applied to health service support to the U.S. Army in the 1990's. The following discussion builds on the preceding description of the battle's medical support in order to address a number of those observations.

PLANNING: Quality Health Service Support (HSS) is not the result of a surgeon's haphazard arrangements or his operating in a vacuum. Indeed, HSS requires significant leadtime and input if it is to be provided in a form that will be of benefit to the sick and wounded. To this end, the staff surgeon and his operational planners must be an integral element of the command's preparation for battle. Being an integral element to preparations, in turn,

necessitates that the surgeon and his staff have complete access to all portions of the planning cycle. If either the quality or quantity of data is deficient then, very likely, the medical support package will be deficient.

The mission statement, commander's intent, timelines and suspenses, and resources consumed and available are all important inputs to the HSS estimate of the unit situation. Without access to any one of these bits of information the HSS estimate will not be complete. Surgeon Albert Hart, for one, commented on the difficulties he and his brigade and division surgeons felt by not being privy to even the route of march for their units.

In the Army of Tennessee Stout understood that the command's mission would be to withdraw from positions around Chattanooga in order to find more defensible terrain to the south. He also knew that the timeline, in this case, was entirely in the hands of the Union Army. Armed with this information he had the opportunity to move his general hospitals as whole organizations, thus leaving Perin and his medical department only empty buildings. Meanwhile, Perin was conducting medical planning within the framework of his command's mission, timelines, and resources. As a result, the Army of the Cumberland began the campaign with medical supplies and ambulances sufficient to meet three months of field duty and an evacuation plan that took advantage of the rail lines to the northern hospitals.

TACTICAL COMPETENCE: The requirement for the HSS leaders to be included in the planning process introduces a second and related observation: the need to understand the battlefield and the unit's role on it. If they are going to serve as productive staff members, HSS leaders must have the ability to evaluate a given situation and apply the same operational skills and knowledge as the maneuver combat planner would. For example, Perin's critics, such as Duncan and Gillett, question his grasp of Rosecrans's command intent. The objective of the campaign, after all, was to take and hold Chattanooga. Why, they wonder, were seven of the ten field hospitals positioned south of the using units instead of between the Army and Chattanooga? By being located far on the right wing the hospitals were at risk of ending up in the exact situation they eventually found themselves. That is, on Sunday the 20th they became isolated from the Army and unavailable to serve the wounded.

Two possibilities are ignorance and astuteness. If Perin knew little of combat medical support the reader might accept that the hospitals were improperly located. In this context, only a command surgeon unaware of the commander's intent, terrain, and battle positions would place his front line hospitals in an exposed position. But Perin was not a novice to combat medical support; he knew well the need to properly position hospitals for the benefit of the wounded. It is just as probable that Perin used his knowledge of

combat to place the hospitals. Specifically, the Battle of Chickamauga was initially fought as a meeting engagement with both Armies moving for position when they ran into each other. In this case Perin may have preferred improperly positioned medical support to no medical support at all. Risk, after all, is as inherent in medical planning as it is in operational planning.

But to make this kind of risk-accepting decision, then and today, means that HSS leaders must have a complete grasp of operational concepts, capabilities, and concerns. This understanding is not limited to the nine categories of HSS. Rather, the HSS planner's skills must include such far-ranging topics as the principles of war, concepts of operational design, and an army's doctrinal tenets. In other words, the HSS planner must be able to speak and understand technical and operational language (Army talk).

CONTINGENCY PLANNING: Being involved in the planning cycle and having a full understanding of how the Army operates while in the field allows the HSS planner to react to events that might cause changes to the original plan. This means that the command surgeon and his planners are always looking beyond the current operation. Clearly, the Battle of Chickamauga demonstrates the need to plan HSS beyond the conduct of immediate tactical operations. Coordinating HSS just to meet the needs of the immediate operational plan is not adequate. Instead, the HSS leader

must also consider branches (what next) and sequels (what if) to the command's operational plan. Acceptable HSS planning, therefore, must consider actions to be taken when faced with either success or failure of the initial mission.

Surgeon Blair, of the First Division, XXI Corps, realized this when he noted that "it is a wonderful undertaking to care for the wounded where the battlefield is retained but when the field is lost, it is incomparably greater." * Had Perin fully considered the possibility of his Army losing control of the battlefield he may not have left the division hospitals on the right flank. Instead, he may have consolidated or evacuated the patients and moved as many hospitals as possible to a more tactically acceptable position during Saturday night's lull in the fighting.

The Confederates response to the outcome of battle seems to have obeyed, in at least one instance, the need for considering branches and sequels. By Monday morning, even with an inadequate number of ambulances, the wounded were being moved to the commissary depots. The Army had prepared for the shortage by planning to use empty supply wagons to move the wounded. Having access to those wagons was the end result of the interaction among some staff officers.

STAFF COOPERATION: Just as HSS personnel cannot plan in a vacuum, neither can they provide HSS without the support of the staffs from other functional areas. Backhaul of patients, protection of the medical facility, rations,

and transportation augmentation are examples of how HSS is assisted by other staff sections. Even at the very lowest levels of support a medical unit must rely on other staff sections to provide rations and protection.

Examples come from both armies. Stout ran into many problems with staff cooperation in moving his hospitals. In some instances a commissary officer had not been assigned to arrange for rations. In other locations quartermaster help was not quickly forthcoming. Meanwhile, Surgeon Perkins, of the Federal XX Corps, had not been coordinated with when it was decided to reduce the medical supply allowance to 500 pounds for the march south of the Tennessee River.

On the other hand, staff officers of both armies succeeded, either by design or accident, in providing the needed wagons to backhaul patients from the battlefield and subsequent hospitals. This example of staff cooperation meant that the wounded soldier arrived at a general hospital sooner, and with a better prognosis, than if only ambulances were used. Still, even with practiced staff cooperation and coordination, problems can exist if HSS needs are not truly understood by the non-medical staff officer.

UNITY OF COMMAND: Medical organizations must be owned and commanded by medical personnel. This applies equally to all HSS treatment, evacuation, and logistics units on the battlefield. Treating the injured soldier means more than just applying a bandage to a wound before

evacuating that soldier. Other concerns include assigning the right size and type of unit, knowing where the available hospital beds are located, moving medical supplies quickly to the requesting unit, and having immediate and unbroken access to evacuation assets.

Only the surgeon and his staff have the expertise to ensure that the correct HSS assets are properly located on the battlefield in order to adequately care for the sick and wounded of the command. Perin demonstrated this with the transformation of his Army's medical department from that which he found at Murfreesboro to that used at Chickamauga. Although the quartermaster department still owned the ambulances, they were required to respond to the needs of the surgeon. As a result, the ambulances were readily available and performed their assigned missions.

Unity of command also allows certain HSS-specific staff functions to be properly considered, planned, and prepared for execution. Among these are the following.

LEAVING PATIENTS BEHIND: As Rosecrans and the Army of the Cumberland discovered, the number of patients needing evacuation may well exceed the capability to evacuate. If this occurs in a retrograde or withdrawal the commander may be forced to leave the patients at the medical facilities on the battlefield. The surgeon's duty in this instance has at least three elements.

First, the surgeon must keep the commander and his staff apprised of the situation. It may be that, through staff knowledge and cooperation, backhaul vehicles can be found to move the wounded. If not, the commander should have as much advance notice as possible in order to make his decision. Second, the surgeon will have to arrange to leave sufficient medical personnel and supplies with the wounded to care for their needs. The difficulty with this decision is ensuring that the wounded are properly cared for while limiting the impact on the ability to provide adequate care for the remainder of the command.

Finally, the surgeon will have to alert his staff and subordinate surgeons. First, the medical personnel who will stay with the patients must be given enough time to make any personal preparations necessary. Surgeon Joseph Woods experienced this when "it fell to my lot [to stay behind with the wounded] and with many regrets I divided my clothes sent away my horses and consigned myself to fate." It will also be their duty to choose which patients are evacuated on any available transportation and which ones will be left behind. The process of choosing patients to stay on the battlefield introduces a second HSS function lending itself to unity of command.

TRIAGE: Deciding which wounded will be treated immediately, which will be cared for next, and which will not be treated is never easy. Unfortunately, the decision

is predicated less upon the distress and discomfort of the patient and more upon the stark reality that supplies, time, and personnel are limited on the battlefield.

A dramatic example of the need for triage was seen with the Army of Tennessee problem of handling over 17,000 Confederate and Union casualties. Less evident, but just as realistic, is the frontline surgeon or medical aidman who is faced with two or more simultaneous casualties. At both ends of this spectrum is the requirement that medical personnel, and no one else, are responsible for selecting who will be treated and who will not.

These types of life and death questions are best argued within the HSS community among HSS professionals. In such an environment it is more likely that HSS issues, such as triage, will be made on merit rather than emotion. The accuracy of such a statement, however, is largely dependent upon the skill, knowledge, and training of the surgeon.

CONCLUSIONS

There are two significant results that arise from the reader's acceptance of the implications discussed above. First, the medical department of a military organization must have both the complete support and cooperation of non-medical leaders and commanders at all levels of the command. Second, military HSS personnel must be thoroughly trained in the combat-unique aspects of their profession. Additionally, neither of these issues can exist in an

environment where the other is missing. Command support provides the time and resources necessary to teach wartime skills in a setting of continuing peacetime requirements. This type of support develops well trained HSS personnel who demonstrate their willingness and ability to provide for the organization and its troops in combat. Such competence, in turn, increases the line leadership's willingness to support the medical department's doctrinal, tactical, and resource changes and refinements. The observations and implications of this study of the medical support provided to the Union and Confederate Armies at the Battle of Chickamauga are thus reduced to two great lessons.

The U.S. Army of 1990 has a lower ratio of combat experienced Army Medical Department leaders than at any time since, probably, before World War II. In such a situation history can serve as an important element in the education and training of today's and tomorrow's medical leaders. Let all understand that the beneficiary of this historical analysis, and its suggested requirement of complete command support and dedicated medical training, is the very essence of an army: the soldier.

ENDNOTES

CHAPTER 7

1. OR 30/1: Battle Report, Starkweather, 23 Sept. 1863, 302.
2. OR 30/1: Battle Report, Rosecrans, Oct. 1863, 62; Typical comments are seen at OR 30/1: List of Special Mentions, Rosecrans to [Thomas], 7 Jan. 1864, 89; OR 30/2: Battle Report, Bragg, 28 Dec. 1863, 36.
3. OR 30/1: Battle Report, Lane, 26 Sept. 1863, 480-1; Stout, "Outline" 72; Harwell Kate 152.
4. William Blair, Personal Note, n.d., Blair Papers, Indiana Historical Society, Indianapolis, IN.
5. Joseph Woods, Personal Letter, n.d., Woods Papers, Duke University, Durham, NC.

APPENDIX 1

APPENDIX 1

SURGEON'S REPORTS: LISTING AND CROSS REFERENCE

The Official Records contain the battle reports of medical director Perin and the chief surgeons of each of the Union Corps. The Medical and Surgical History contains these reports as well as those from the chief surgeons of divisions and other surgeons. No Confederate reports are recorded. This Appendix serves to index the Union reports.

<u>Surgeon and Organization</u>	<u>OR</u>	<u>MSH</u>
Glover Perin, Army of the Cumberland	.221	265
Ferdinand Gross, XIV Corps.	.258	268
S. Marks, First Division, XIV Corps	-	270
Roswell Bogue, Second Division, XIV Corps . . .	-	272
Moody Tollman, Third Division, XIV Corps. . .	-	273
O.Q. Herrick, Fourth Division, XIV Corps. . .	(Captured) -	
Jabez Perkins, XX Corps	.494	274
Luther Waterman, First Division, XX Corps . .	-	275
Charles Schussler, Second Division, XX Corps. -		276
David Griffiths, Third Division, XX Corps . .	-	277
Alonzo Phelps, XXI Corps.	.619	277
William Blair, First Division, XXI Corps. . .	-	278
S.G. Menzies, Second Division, XXI Corps. . .	-	280
Samuel Turney, Third Division, XXI Corps. . .	-	280
L.A. James, Cavalry Corps	-	281
Samuel Hart, 16th United States Infantry, Third Brigade, First Division, XIV Corps. -		281
Israel Moses, Chattanooga Hospitals	.244	281
Dallas Bache, Army of the Cumberland.	-	287

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