

Four Connecticut Physicians: Window to Civil War Medicine and Service

ROBERT M. BEDARD, MD

AS mentioned in the introduction to this section, Connecticut's contributions to both Abraham Lincoln's 1860 presidential election and the Civil War, extended beyond politics to all walks of life. Connecticut physicians were strong in support of the Union. Over 110 Connecticut doctors served as recruit examiners, regimental and naval surgeons, contract physicians in Army hospitals, and as citizen volunteers caring for the sick and wounded returning from war.¹

Connecticut Physicians in the Civil War, a 1965 Civil War Centennial pamphlet, by Dr. Stanley B. Weld, lists in encyclopedic detail the activities of both Connecticut-born and postwar residents of the state who served as physicians during the conflict.² Through a mix of ingenuity, skill and humanity, Connecticut doctors performed remarkably under the most challenging circumstances. Four selected physician histories will highlight their contributions and important points about Civil War medicine. The latter include:

1. The endemic and often epidemic nature of diseases such as chicken pox, malaria, measles, smallpox, typhoid, diarrhea and dysentery;
2. The higher mortality rates for disease than for battlefield wounds in a ratio of 2:1;
3. The development of a tiered battlefield care and evacuation system or what we now know as "triage";
4. The nearly universal use of anesthetics for surgery and wound care;
5. The acceptance of women as nurses.

The Role of the Civil War Physician-Surgeon

Sixty-five thousand Connecticut citizens and noncitizen immigrants served as soldiers, sailors and marines. Most joined as volunteers or as a consequence of the 1863–1865 drafts. Soldiers were organized into the volunteer regiment, the core unit of Civil War armies. Connecticut fielded 30 infantry and two heavy artillery regiments, one cavalry regiment and a number of artillery batteries. Each of these units had one to three physician-surgeons as support staff. As officers, the doctors received commissions through the governor of the state based on merit, patronage, and expediency. The selection process included oral and written examinations before a panel of respected physicians.

Once assigned, the regimental surgeon assisted in the recruitment and training of the regiment, which on paper had a strength of 1,000 men. Losses due to disease and battle attrition often reduced effective regimental strengths to less than 200 soldiers. Examination of recruits occurred in camps across the state. Questions about past and present health, and physical examinations, focused on the disqualifying discovery of serious illness, unsound teeth, limb and spine deformities, and hernias. There was also interest in the degree of alcohol consumption and past smallpox disease or vaccination. The unvaccinated would be vaccinated and then placed in quarantine for three weeks.

Once passed and enlisted into the regiment, a recruit would be trained for months in the "School of the Soldier"—drilled in marching, formation changes, rifle loading and firing. The surgeon's role was to treat illness and injury with the primary goal of maintaining the fighting strength of the unit.

Endemic and Epidemic Diseases

As a consequence of the proximity of so many young men in confined spaces of barracks and tents, soldiers developed infectious diseases to which they had not previously been exposed. Camp outbreaks would often curtail training and cause infirmity and death. For example, one third of the Third Vermont Volunteer Infantry, a 900-man Connecticut Valley unit, organized at St. Johnsbury, Vermont, in June 1861 developed measles within a month.³ It is likely that similar outbreaks of measles, chicken pox and mumps occurred among the Connecticut regiments.

Upper respiratory tract infections (“catarrhs”) also affected many who were billeted in close quarters. Soldiers would be afflicted with “camp cough,” a common malady for which the regimental surgeon was seen at morning “sick call.” Soldier reminiscences of the era relate the multiple pitches and tones of the coughing as dawn reveille broke and the soldiers were roused from their blanket rolls.

Mortality Rates Due to Disease versus Battlefield Wounds

Of the nearly three million Union soldiers who served during the war, about 360,000 died. Disease and accident caused over 230,000 deaths while battle injury accounted for 110,000.⁴ Connecticut’s losses were in keeping with these totals; 3,490 died of illness and accident, 2,088 of battle wounds.⁵

A common killer was diarrheal disease. In the modern era of public health knowledge, our sensibilities are strained by the then lack of attention to, or ignorance of, adequate sanitation and the need for clean water and unspoiled food. A “disciplined” camp was a healthier camp, where night soil was properly handled in “sinks” or latrines according to army regulation. Fewer soldiers would be on “sick roll” due to diarrhea and dysentery. Even with the best camp and campaign discipline, water and food sources were often contaminated by pathogenic bacteria and parasites. The germ theory of disease was still a nascent idea in the minds of such future luminaries as Pasteur and Koch. Bacteria were known, as they were present in specimens seen under the microscope, but their causal connection to disease was not yet recognized.

Diarrheal diseases were categorized by duration (acute or chronic), and by recognizable patterns, such as “the bloody flux,” or by clinical features as in typhoid with its characteristic rose rash, disparity between fever and pulse, abscesses, hepatic involvement and delirium. Typhoid was particularly severe with a mortality rate upwards of 40% and with a propensity towards chronicity and permanent disability in survivors.

“To have the guts” to be a soldier did not mean being courageous.⁴⁽³⁶⁵⁻⁶⁾ The incidence of diarrheal disease at some periods reached 2.5 episodes per Union soldier per year.⁶ “To have the guts” simply meant that the soldier could tolerate and still function with frequent or chronic diarrhea.

Connecticut Doctors’ Wartime Experience

Dr. Melancthon Storrs’ experience is an example of the difficulties that a regiment could have on campaign in the midst of a typhoid outbreak.²⁽²⁹⁾ Dr. Storrs, born in Westford, Connecticut and an 1853 graduate of Yale Medical School, left his Colchester practice of eight years to join the Eighth Connecticut Volunteer Infantry in October 1861. His regiment was assigned to a coastal campaign in North Carolina in 1861–1862. While there, his regiment was hard hit by typhoid. In April 1862, 60 soldiers were sick with fever, and nearly 40 had typhoid. Of all the regimental officers, only Surgeon Storrs and two captains were well and on duty. Storrs’ response to the outbreak was cited as being “diligent, quietly faithful, skillful, quick to see, and steady and calm in execution.” Dr. Storrs was summoned from his regiment to assist at the Coastal Army’s general hospital. So manifest was his excellence that he was sent for a “special purpose” or honor to Washington and then promoted to brigade sur-

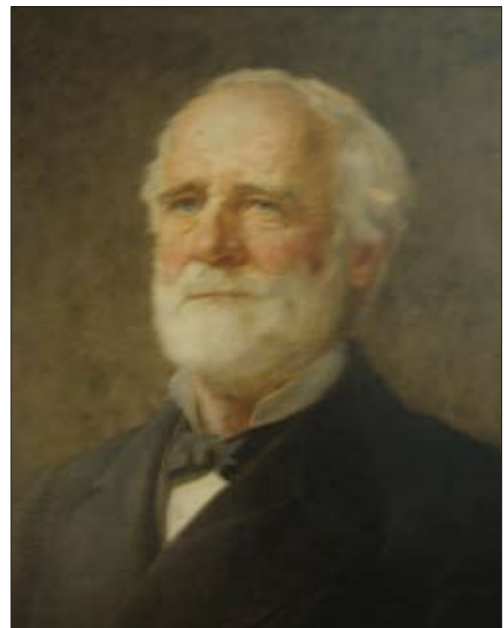


Figure 1.—
Postwar Portrait of Dr. Melancthon Storrs
by Charles Noel Flagg.
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Hartford Medical Society, Hartford, Connecticut.

geon. After discharge in 1864, he continued as an Army contract surgeon until July 1865. Thereafter, Dr. Storrs restarted a Hartford practice emphasizing surgery and was a member and president of both the Connecticut Medical Society and the Hartford Medical Society. He died on December 9, 1900 of sepsis after cutting his finger while operating to drain an empyema.

One theory of disease in the mid-19th century was that illness was a consequence of exposure to “miasma” or “malaria” (bad air). Based on clinical presentations and characteristics, febrile illnesses were often labeled as “miasmatic” or “malarial.” Physicians often called them “valley,” “swamp” and “camp fevers.” We now know that the “miasma” carried mosquitoes, which carried the malaria protozoa or the yellow fever virus. Malaria was a common affliction of the armies assigned to campaign along the coastal and river areas in the South. The hectic and recurrent nature of malarial fevers was well recognized and documented in many a surgeon’s sick rolls. Quinine from Peruvian cinchona bark was an effective treatment.

Another Connecticut physician, **Dr. Nathan Mayer**, was a prolific and humorous writer. In his unpublished memoir, *A Connecticut Surgeon in the Civil War: The Reminiscences of Dr. Nathan Mayer*,²⁽¹¹⁻²⁾ he is portrayed as energetic and resourceful when confronted by a typhoid outbreak in his Sixteenth Connecticut Volunteer Infantry Regiment stationed in coastal North Carolina in 1863. After their ocean voyage to the area, “the Boys” of his regiment were enthusiastic about living off the land. Dr. Mayer reported the following:

“The result was a great number of typhoids. I was at once in charge of 30 typhoid cases housed partly in log barracks formerly occupied by Confederate soldiers and partly in the old mansion of a governor of colonial days. I moved them into tents as soon as I could draw any and organized a corps of nurses from the rough material of our boys. I assure you, they were not bad. The American has the facility, and these country boys carried out my *Munich* ideas better than they deserved. For I was the martinet. I tried to improvise a *German* hospital in an American camp until I saw my folly. In an ambulance I headed a party into the enemy’s country and brought in several cows. I put them in charge of a man from Pomfret—his captain maintains that he marched in cow step thereafter—and had milk for my typhoids better than the Borden condensed, which was supplied in cans. I went into New Berne [North Carolina] and unearthed some kegs of beer. I paid for them out of the hospital fund and stimulated my patients in *Munich* fashion. Above all, I had the dejections carried off and buried daily at a distance. Fortunately, the regiment had moved off three miles, leaving me with my hospital in an exposed position but sanitarily good. Only two of 30 died, one of utter exhaustion and the other of perforation, and I sent the section of perforated bowel to the brigade surgeon, having made a post mortem. The cooking was something awful, and I had to look into the kitchen daily, though I myself did not know anything of that department except by intuition.

But I had not alone typhoids. In a hospital tent one-half mile away in the woods, there were smallpox cases, at first only a few and then more, up to 25. The disease must have been brought along with the expedition. The milk and the water and the food were carried to the edge of the wood by my typhoid nurses three times a day. Then, the four Negroes who attended the smallpox cases came and got it. I was the only white person who went to the smallpox tent. [Dr. Mayer relates that he changed out of his uniform into a scarlet flowered calico morning robe, tying his head in a bandana before attending the smallpox cases.] The smallpox people got no beer but whiskey. I lost one case, and we buried him in the woods—a slender, fair-haired boy full of patriotic fire. After most of my patients had recovered and the few convalescents had been placed in a general hospital, I burned the entire outfit and got back to my regiment. I took my place at surgeon’s call. The range of diseases was not extensive. Malaria, diarrhea, and malingering held first place, then occasionally sore throat and rheumatism. Most of the young men were in their prime.”

Dr. Mayer, a German Jew by birth, came to the U.S. at age 10. He graduated from Cincinnati College of Medicine and Surgery, following which he took lectures on a European tour to Munich (where he, no doubt, learned an appreciation of the medical properties of beer), Vienna, and Paris. After the war,



Figure 2.—
Postwar Image of Dr. Nathan Mayer.
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Hartford Medical Society, Hartford, Connecticut.

he practiced in Hartford and was a founding father of both St. Francis and Mount Sinai Hospitals. He was a novelist, an art and drama critic for *The Hartford Times* and frequent reader of clinical papers, poems and literary works at meetings of the Hartford Medical Society as member and president (1902). He died in 1912.⁷

Union Ambulance Service: Care for the Wounded

Regimental surgeons gave immediate and ongoing care for battlefield casualties. The predominant wound seen at collecting stations, makeshift battlefield hospitals, and subsequently at general hospitals was caused by the rifle bullet. The introduction of the rifled musket and “Minie ball,” (a conical soft-lead bullet that when fired had a greater range and accuracy than the round ball fired from the Napoleonic-era smooth-bore musket) resulted in most battlefield casualties. Wounds from artillery were fewer. Bayonet wounds were infrequently seen and likely resulted in death on the field. Close-quarter hand-to-hand combat was an exception to the rule of killing from a distance. Approximately 19% of battlefield wounds resulted in death. Fortunately, many wounds were superficial and could be treated with debridement and resection, with healing by primary and secondary intention.

At the First Battle of Bull Run (July 21, 1861), the Union Army’s rudimentary ambulance service failed under the demands of the many wounded and the rout of the army. In 1862, Dr. Jonathan Letterman, chief surgeon of the Union Army of the Potomac, developed an improved evacuation system that still remains the model for modern battlefield care. The wounded were collected by stretcher and ambulance, taken to makeshift battlefield aid stations and hospitals in the immediate rear, and then to larger hospitals in towns and cities. The regimental surgeons, assisted by stretcher bearers, hospital stewards and bandsmen, gave immediate assistance to the wounded flowing to the rear of the battle line. The immediate task was to control bleeding. Decisions were made as to whether wounds were mortal or not. Bleeding was staunched by occlusive bandages and suturing. Water and spirits (brandy and rum) were given, the latter considered a stimulant. Those with a prognosis considered favorable would be brought further to the rear, where debridement, removal of foreign material, and further assessment of injuries were performed to determine if damaged limbs could be saved by resection or not. Limb amputation, though radical, could lessen the secondary risk of infection, bleeding and pain from underlying compound fractures and lives were saved by it.

The Common Use of Anesthetics and Surgery

Wound assessment, debridement, and surgeries during and in the immediate aftermath of battle were generally carried out in the open air under tents or in local dwellings under general anesthesia using chloroform or ether. Contrary to popular belief, anesthetic administration for the treatment of wounds and dressing changes was commonplace in the care of the wounded Civil War soldier.⁴⁽⁷⁶⁻⁸¹⁾

Specialization did occur as the war progressed and clinical talents and strengths became evident. Some doctors were assigned to supply administration, aid stations and wound care, others to roles as operating surgeons or anesthesia administrators. Union armies recognized the growing expertise that this specialization afforded. By the end of the war, skilled regimental surgeons were assigned to larger organizations at the division, corps, and army level where the economies of scale and efficiency could be best developed and maintained.

Skillful and imaginative surgical procedures were often performed to save lives and limbs. The previously mentioned surgeon, Dr. Melancthon Storrs, promoted to Division surgeon in January 1863 with the Army of the Potomac, performed a number of operations on wounded soldiers.²⁽¹⁷⁻⁸⁾ On one soldier affected by acute urinary retention due to a wound to the pelvis, he surgically created a vesiculorectal fistula to provide relief. The soldier subsequently recovered and returned to duty. Dr. Storrs also reported on a lieutenant shot in the elbow joint; the doctor excised the distal end of the humerus and extracted bone fragments. With recovery, the lieutenant was able to return to duty, albeit with an arm that was limited in function.

Wounds frequently developed late complications of infection and secondary hemorrhage. Pus was an expected development in nearly all wounds. Pus was “laudable” and considered the energy of the injury being expelled; it could take further life as erysipelas and dry or wet gangrene. Clotted and/or sutured vessels would come undone, resulting in catastrophic secondary bleeding. Walt Whitman, in his *Specimen Days* journal relates, in strong and evocative prose, vignettes of soldiers suffering and

dying of “pyemia,” gangrene and bleeding in a Washington, D.C. Army hospital. “This place seems to have got the better of me,” he wrote after serving months as a volunteer hospital aide.⁸

As a consequence of the many amputations, advances in the use of prosthetic limbs would be a postwar consequence. A common surgical procedure done at Hartford Hospital in the immediate postwar years was revision of an amputation stump.⁹

The Role of Women in Nursing

The Civil War led to the increased acceptance of women as nurses. Dorothea Dix was brilliant in her selection and organization of nurses for the Union effort. “Mother” Mary Ann Bickerdyke of Illinois, a Quaker woman, was so revered by Sherman’s Army that the soldiers insisted that she lead them in the triumphal Grand Review in Washington, D.C. at war’s end. Clara Barton, a Patent Office clerk volunteered as a field hospital cook, a task she expanded into nursing. After the war she was the founder of the American Red Cross.

Dr. Frederick Dudley of New Haven, a Yale Medical School graduate and surgeon to Connecticut’s Fourteenth Volunteer Infantry Regiment, was assigned to the Third Division, Second Army Corps Hospital during Grant’s Wilderness/Spotsylvania Campaign in April 1864. Cornelia Hancock, a young Quaker woman, was also at the hospital. Miss Hancock had ample past experience as a Civil War nurse. She traveled to Gettysburg in July 1863 to serve as a volunteer nurse at the Second Corps Hospital of the Army of the Potomac in the aftermath of the battle there. She met Dr. Dudley (wounded in the battle) briefly at that time, and they were both surprised to meet again in 1864 by her return assignment as a volunteer nurse. Miss Hancock wrote letters and kept a diary.¹⁰ Her letters imply that Dr. Dudley gained an increasing appreciation and respect for the disciplined women who cared for his wounded and ill charges. To her, Dr. Dudley was a skilled professional, but also exasperating in his profanity, smoking and drinking.

Following the war, Miss Hancock and Dr. Dudley went their separate ways. Dr. Dudley practiced medicine in New York while Miss Hancock continued her mission as a nurse and organizer of schools for newly freed slaves in South Carolina. Later, she organized the Children’s Aid Society of Pennsylvania. She died in 1926 at age 87.

Witness to Assassination and Aftermath

While not from Connecticut, Dr. William Child was born and raised in the Connecticut River town of Bath, New Hampshire. He graduated from Dartmouth Medical School in 1857 and joined the Fifth New Hampshire Volunteer Regiment in 1862 as assistant surgeon. He served with that unit throughout the war. The Fifth New Hampshire sustained the most battlefield deaths of any Union infantry regiment during the war.¹¹

While on leave in Washington, after Lee’s surrender, Dr. Child took a night off to see a performance of *Our American Cousin* at Ford’s Theater on April 14. He recorded in his diary:

Early in the evening I went to Ford’s Theater. After a little time the President entered and was greeted with cheers. The play went on for about an hour. Just at the close of an interesting scene, a sharp, quick report of a pistol was heard, and instantly a man jumped from the box in which was the President to the stage, and rushing across the stage [he] made his escape. This I saw and heard. I was in the theater and sat opposite the President’s box. The assassinist exclaimed as he leaped *Sic Semper Tyrannis!*—Thus Always to Tyrants!

I never saw such a wild scene as followed! I have no words to describe it ... I shall remember the fiend-like expression of the assassin’s face while I live.¹²



ASST. SURGEON FREDK. A. DUDLEY.

Figure 3.—Image of Dr. Frederick A. Dudley.
From The History of the Fourteenth Regiment, Connecticut Vol. Infantry by Charles D. Page. Meriden, Connecticut: Horton Printing; 1906: 245. Reprinted by Higginson Book Co., Salem, Massachusetts; 1998. Used with kind permission.

Dr. George Loring Porter was also in the thick of things during the war and as a consequence of Lincoln's assassination.²⁽⁵⁰⁻¹⁾ Born in 1838 in Concord, New Hampshire, Porter took undergraduate training at Brown University and obtained his medical degree in 1862 at Jefferson Medical School. He passed the Army Medical Board examination shortly thereafter and was assigned to General Nathaniel Bank's Army of the Shenandoah, then engaged in chasing and being chased by General T.J. "Stonewall" Jackson's troops in that valley. On a Union retreat, Dr. Porter volunteered to remain with the sick and wounded. He was captured by the renowned Confederate partisan, Col. Turner Ashby, but then placed in charge of a hospital by none other than "Stonewall" Jackson. Dr. Porter was one of the earliest physicians to have protection from *The Rules of War* governing noncombatants applied to his service.

Following hard-riding service as surgeon to the United States Fifth Cavalry from 1862 to 1864, Porter was assigned as a post surgeon at *The Old Penitentiary*, Washington, D.C. where he supervised medical care to the imprisoned Lincoln assassination conspirators. As the officer in charge of the detail, he witnessed the secretive first burial of John Wilkes Booth.¹³ Dr. Porter attended the execution and interment of the assassination conspirators Lewis Powell, David Herold, George Atzerodt and Mary Surratt.¹⁴ He later escorted the remaining four convicted conspirators, including Dr. Samuel Mudd, to the island prison, Dry Tortugas, Florida.

Following this service, Surgeon Porter took a long ride on horseback, retracing the Lewis & Clark Trail to the West Coast. He returned east in 1868 to establish a medical practice in Bridgeport. A nationally known forensic and public health expert, he was an officer in the Connecticut Medical Society, the American Medical Association and the Medico-Legal Society. He died in 1919, one of the last witnesses to the aftermath of Lincoln's death.

In this special section on Lincoln in *Connecticut Medicine*, we honor the bicentennial of his birth. We also pay tribute to all of Connecticut's Civil War surgeons—participants and witnesses to great and terrible things. We hope that continued lessons—civic dedication, professional excellence and endurance—can be gained by reflection upon Lincoln and the courageous role of Connecticut physicians in the Civil War.

ROBERT M. BEDARD, MD
*Connecticut Asthma and Allergy Center, West Hartford,
 Senior Staff, Hartford Hospital
 Clinical Instructor, University of Connecticut School of Medicine
 Member of the 14th Connecticut and 5th
 New Hampshire Volunteer Infantry Historical Re-enactor Organizations.*



Figure 4.—
Carte de Viste Image of Dr. Charles Loring Porter 1862.
*Used with the kind permission of a great great granddaughter,
 Marcia Loring Huntley Maloney.*

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