

Medicine during the Civil War

Angie Quinn

For many of us in Quest Club, when we first hear about our upcoming paper topic, we immediately think through our mental filing systems to pull out what bit we might already know about it. Here is what came to mind for me upon receiving this assignment:

Scarlett walks between the rows of injured soldiers following the battle of Atlanta, overcome by the suffering, but on a mission to find a doctor who can assist Melanie who is about to deliver the baby of Ashley Wilkes. Injured men as far as the eye can see, dark hospital ward where the moans of the wounded are punctuated by screams as one poor victim has a limb amputated.

I am very happy to report that this will not be a rehashing of *Gone With the Wind*. I have enjoyed the process of researching and writing this paper. I'll also try to refrain from further discussion of amputation, along with morbidity or gangrene until everyone has finished eating.

Popular Culture would have us believe that those injured during the war that nearly destroyed federal control in the United States faced filthy hospital conditions, butcher-happy physicians quick to remove limbs, and contagious diseases. Those images are, for the most part, accurate, particularly during the beginning years of the war. However, many standard features of modern medicine were introduced in response to the military needs of the day and continue to be used today.

A 2016 article in the *Baylor University Medical Center Proceedings* identified several important medical and surgical advances during the Civil War including:

- Establishment of large general hospitals
- Creation of specialty hospitals
- Development of an ambulance system for evacuation of the wounded

- Use of trains and boats to transport patients...
- Use of quarantine, which virtually eliminated yellow fever
- Successful treatment of hospital gangrene with bromine and isolation...ⁱ

To these, I am adding the development of nursing as both a military position and a formal profession, and the creation of new roles for non-military personnel in supporting the military effort. In the interest of time, I will not discuss all of these, but will focus on organizational and personnel improvements. In order to illustrate their importance, this paper will describe conditions before the war, practices adopted in response to the war, and new opportunities for service to wounded soldiers, for women, and non-combatants. I'm going to use the narratives of a few individuals, several of whom were from the Fort Wayne area, to illustrate the story.

My husband inherited the library of a 19th and early 20th century school-teacher and her relatives who had lived in the same house near downtown Fort Wayne from 1868 until 2003. Most of the collection consisted of textbooks, poetry, pedagogy texts, old encyclopedias, histories, as well as popular fiction from 19th and 20th centuries. Most had the names of herself or other family members written inside the cover, often with Fort Wayne written below.

One odd-ball book interested my husband, as we began to work our way through a house full of newly inherited belongings. Entitled *Medical Students Vade Mecum, Third Edition*, it was compiled by George Mendenhall, MD, and published by Lindsay and Blakiston, Philadelphia, in 1852. Inside the cover, however, we found the name "I. B. McDonald, Louisville Ky." Knowing a bit about the genealogy, we quickly ruled out any family members, and we remain unsure about how this volume made it into the family library.

Through the power of Google, I found an Isaiah B. McDonald who lived in Columbia City, Indiana for most of his adult life. His biography notes:

"Col. Isaiah B. McDonald attended the public schools in Ohio until his parents moved to Indiana. In February 1844, he returned to Ohio, and there worked as a farm hand for a

time, going to school in the winter season...He then taught school in Ohio for three years, after which he followed the same occupation at Christiansburg, Kentucky, (about 15 miles east of Louisville) for two years. He read law under the instruction of John McSweeney, of Wooster, Ohio, and Martin D. McHenry, of Shelbyville, Kentucky, and on his return to Indiana in June 1852, he was elected prosecuting attorney for Noble and Whitley counties.”ⁱⁱ

Is it the same person? I’m not sure, but he sure has an interesting biography. We’ll use Mr. McDonald’s book and the story of Isaiah B. McDonald throughout this paper.

In 1860 the United States had a population of 31, 442,321. This included 3,953,761 people who were enslaved. Although there is information about the history of medical training in the United States, I was not able to find any information regarding the number of practicing physicians in 1860. The nation’s first medical school, Philadelphia College of Medicine, was organized in 1765, and later renamed University of Pennsylvania. By 1860 there were sixty-six medical schools, and a variety of curricula, theoretical underpinnings, and recommended treatments. Doctors could either study allopathic methods, eclectic methods or homeopathic methods. During this time, future doctors could also learn their craft by apprenticing with a professional doctor, bypassing formal education.

Although most medical students were white men, there were a few exceptions. Elizabeth Blackwell became the first woman in the world to graduate with a medical degree in 1848. The Female Medical College of Philadelphia opened in 1850, and the New England Female Medical College opened in Boston in 1852 as the first women’s medical colleges. By 1861, at least 200 women had obtained medical degrees in this country. In Fort Wayne, Mary Frame Thomas provided care to local citizens during the 1850s, following her graduation from the Female Medical College of Philadelphia in 1854. ⁱⁱⁱ Esther Hill Hawks, of Manchester, New Hampshire was another early student, and graduated from the New England Female Medical College in 1857.^{iv}

In 1860 medicine in the United States was divided between several alternative medical certification options. Germ theory was not yet known. Many medical professionals still followed

the practices of patriot and early American physician Benjamin Rush, who called for bloodletting for every malady, from sinus infections to cancer. Allopathic physicians followed what might be called a “more is more” approach, which included what were called “heroic” treatments like mercury, antimony and other poisons to cure illness. Homeopathic practitioners offered a “less is more” approach, and often suggested minute amounts of medicine or treatment, over time, as for instance, small amounts of bloodletting with leeches every day to invigorate the body. Others specialized in eclectic medicine, including Dr. Graham’s vegetarian healing practices.

By 1860 as the country’s divisions over slavery and states’ rights intensified, student unrest increased on college campuses. In 1859 almost 300 medical students who were studying in Philadelphia at either Jefferson or University of Pennsylvania medical schools, quit and returned to their southern homes in protest over the parading of John Brown’s body through the streets of the city.^v

War was declared on April 12, 1861 and on April 15th President Lincoln called for 75,000 volunteers to defend the union. One of Isaiah B. McDonald’s biographers writes: “At the breaking out of the War of the Rebellion, he was chiefly instrumental in organizing a volunteer company of infantry, known as Company E, 17th Indiana Volunteers.”^{vi} A second biographer noted that on April 21, Isaiah B. McDonald, then employed as the Whitley County School Inspector, mustered at Indianapolis. On April 25th he was commissioned a Second Lieutenant by Governor Morton.^{vii}

Civil War medical historian Ira Rutkow notes that “Of the 114 doctors serving in the army in 1861, 24 had resigned by spring of that year to join Confederate forces, and 3 more were dismissed for disloyalty. Consequently, the North’s medical corps was left with only 87 physicians to begin its wartime service, far too small a cadre of military personnel to care for a growing combat force.” Rutkow also noted that the Medical Department was in complete “disarray” since its elderly chief, Surgeon General Thomas Lawson, had died on May 15.^{viii}

Even more worrisome, the Army’s medical services were not centralized. Thomas Lawson, as Surgeon General, had overseen all medical personnel. Another entity, the Quartermaster Corps,

built and equipped military hospitals. They also transported sick and wounded soldiers. Still another agency, the Subsistence Department, was responsible for all food and medical supplies for all soldiers, including the medical staff and patients. Subsistence officers were also responsible for providing uniforms, bedding, and so forth. Army physicians, under the orders of the Surgeon General, were responsible for setting up and organizing the facilities in order to care for the wounded following battle. Designed for small scale warfare in the far west, in 1861 Army physicians were not prepared for the large casualties, and the difficulty of safely moving the injured from the field to a safe location for treatment.^{ix}

Within a few weeks of the war declaration, volunteers from many northern states offered their services in non-military capacities, to support the federal cause. On April 28 in New York City, a casual conversation led to the creation of the United States Sanitary Commission. Dr. Henry Bellows, a Unitarian minister and Dr. Elisha Harris discussed how they could assist the government in caring for the soldiers' comfort^x and the prevention of disease. Working with several women's societies already at work in the city, they suggested that women could assist the effort by becoming nurses. They soon were joined by others and reached out to the U.S. Army's Medical Department in New York City. According to one historian, "Surgeon R.C. Satterlee, the Medical Purveyor (purchasing agent) for the area let Dr. Bellows know that 'in the opinion of the representative of the Medical Bureau, the plans proposed by the women could prove of no practical value whatever to the Army.' Undaunted, Dr. Bellows prepared lists of possible needs of the troops that might be met by the work... (of volunteers)."^{xi}

On May 16th, Dr. Bellows and Dr. Harris traveled to Washington DC, along with Dr. William Van Buren, and Dr. Jacob Harsen to again offer the services of volunteers to assist with soldiers' comfort and disease prevention. They found:

...Confusion...The masses of troops filling the city were poorly led, fed and sheltered... (this) New York delegation only added to the bedlam, and with no "official" sanction, it had major problems getting to see anyone in authority.

The delegation's first stop was to see Gen. Winfield Scott...the purpose was to get Scott to agree to reexamine the volunteer (soldiers) to weed out the diseased, disabled and

unfit before they became a major burden...Scott agreed immediately...The next call was on Acting Surgeon General Robert C. Wood, whose reception was cordial, but noncommittal. The Surgeon General was ill and couldn't perform his duties (they thought. Actually, Surgeon General Thomas Lawson had died the day before, on May 15th). Wood's opinion was that the current crisis would only be a repeat of the Seminole and Mexican wars, except on a larger scale.^{xii}

Despite the opinion of Wood, they were heard. On June 9th, Secretary of War Simon Cameron and President Lincoln authorized the creation of the United States Sanitary Commission. On June 10th, Secretary of War Cameron hired Dorothea Dix to organize nursing for the army. According to one historian: "Nominally, Dix was superintendent of an army nursing corps, but without nursing schools and diplomas, the term *nurse* took on a vague meaning. Indeed, most women brought to nursing activities the beliefs that defined their domestic lives...Since most of the soldiers were young men away or the first time, motherly treatment was more valued than nursing care."^{xiii} Referring to the nurses as "Mother" became widespread.

He further described the nurses' role:

Eventually a nurse came to refer to a range of caregivers: a woman appointed by Dix, or a female agent attached to the Sanitary Commission or a state soldiers aid society, or a woman specifically requested by an individual surgeon to work at his hospital, or a nun from one of the Catholic sisterhoods. The term nurse could be applied to an officer's wife who accompanied him to the battlefield or the wife, sister, or mother who rushed to the hospital bedside of a husband, brother or son and remained to care for him... Most often, however, the Civil War nurse was a convalescing male (the male to female ratio was at least five to one for both the North and the South) who was attached to a particular regiment. The result was a confusing patchwork of titles."^{xiv}

Medical school graduate and physician Esther Hill Hawks traveled to Washington during the summer of 1861 in order to volunteer her services as a physician. Women were barred, however, and she applied for Dix's nursing corp. Hawk's application was denied, and her

biographer writes: “Miss Dix, in true Victorian fashion, would approve only middle-aged women of plain appearance. Dr. Esther Hill Hawks was neither.”^{xv}

On June 20th, Dr. Bellows hired the Sanitary Commission’s new Executive Director, who would organize and manage efforts from each northern state, as well as the activities of the national organization. His choice: Frederick Law Olmsted, who was also managing the construction of Central Park in New York City at the time. Among Olmsted’s early tasks was the review of conditions on the battlefield to see where best the Commission could be of service.

Olmsted looked first at conditions to the west. He dispatched Dr. Bellows to Cairo, Illinois for a review of conditions along the western front. According to the medical director at Cairo, John Brinton, there was “violent, remittent, intermittent and low typhoid fevers invaded the camps, and many died. The general hygiene was bad, the company and regimental officers did not know how to care for their men, and the men themselves seemed to be perfectly helpless.”^{xvi}

My husband’s 1852 medical book describes Typhoid Fever as:

“In the first stage there is prostration more than proportionate to the local systems, dulness (sic) of intellect... wandering pains in the back and limbs, dizziness...diarrhoea in about half the cases, anorexia, chilliness, and irregular fever. In the second stage there is an increase in the cerebral symptoms, dulness of hearing, tinnitus, often delirium...enlargement of the spleen, anorexia, eruption of rose-colored papulae on the abdomen and thorax, ... When the condition is favorable, the third stage is characterized...by a gradual diminution about the end of the second week and convalescence at the end of the third.... What is the treatment? In mild cases but little should be done. A small bleeding with diluents, acids, and neutral and effervescing draughts, are generally all that is required. When there are symptoms of cerebral determinations, cups, leeches, or cold applications will be useful; if diarrhoea, opiate enemata will be proper.”^{xvii}

The Vade Mecum also notes the similar but more serious Typhus Fever, noting: “In what prominent features does typhus differ from typhoid fever? It is usually epidemic, manifestly

contagious; the pains in the head, back, and limbs more severe; the lesions after death more variable.”^{xviii}

The spread of contagions, and the poor layout for many camps that combined water for drinking and cooking with waters from latrines and mounted divisions, made diseases such as typhoid, dysentery and yellow fever hard to control. Systems were not in place for the orderly set up of camps. Nor was it clear how ambulances, medical facilities, and medical personnel should be arranged prior to battle.

On July 18th, In the Battle of Centreville, Virginia, a skirmish leading up to the First Battle of Bull Run, the historian Rutkow described the preparations by the Union Army:

The Brigadier General’s aged and ineffectual medical director, William S. King, tells of being in Centreville and going out to meet the returning ambulances with their dead and wounded. Only then did the war’s medical realities become evident to physician King, who (then) decided there was an urgency to ‘select suitable buildings for hospital purposes.’ King watched helplessly as two rickety ambulances approached an area where twelve thousand troops were marching (towards Manassas) and the vehicles’ drivers were told to sit and wait. For two hours, as their fellow Union troops tramped on with indifference, some...wounded lay without medical attention less than fifty yards from Centreville’s Stone Church, now extemporized as an army hospital. Adding to these injured soldiers’ misery was continued lack of water, as thirsty marchers, oblivious to the medical needs of the wounded, drank dry all the surgical basins placed in front of the church.”^{xix}

Three days later, on July 21st, the First Battle of Bull Run, at Manassas, was fought just 25 miles south of Washington DC. The nearby location drew hundreds of residents to the battle site, where they planned to picnic and enjoy the Federal victory over the rebels.

Although 60,000 troops were present at the battle southwest of Washington, D.C., only 18,000 were actively engaged. The fighting was fierce. Casualty counts include those that were killed, wounded, captured or counted as missing. During the July 16th battle there were 2896 Union

casualties, 1982 Confederate casualties, 4878 in total were killed, wounded, missing or captured. 9 surgeons were reported missing.

Over 27% of those engaged were affected. And to complicate matters further, the Union retreat was difficult due to large number of observers who brought picnics to the battle, expecting to observe the performance and enjoy an easy victory for the federal troops. Both picnicker and soldier fled back to Washington DC via the same road.

Frederick Law Olmsted was not among the picnicking observers of the battle, having been called to New York City to manage the Central Park construction project. Olmsted described the aftermath at a September meeting of the board of managers of the Sanitary Commission, as quoted and described by Rutkow:

“No pack of whining, snarling, illified, vagabond street dogs in an oriental city ever more strongly produced the impression of forlorn, outcast, helpless, hopeless misery...They entered the field of battle with no pretense of any but the most elementary and imperfect military organization and, in respect of discipline, little better than a mob, which does not know its leaders...” Olmsted pointed to other problems. The march to the battlefield was too quick. Arms and equipment were thrown away with little consideration for future needs. Medical supplies never reached the front lines. And, the health of the volunteer troops was abysmal: “blistered feet, rheumatic pains, aching limbs, diarrhoea, and nervous debility being prevalent.”^{xx}

On the Western campaign in Virginia, in 1861, the Indiana 17th Volunteers engaged in battles that led to the division of the western counties of Virginia, which became the State of West Virginia. Lieutenant Isaiah B. McDonald and the Indiana Volunteers were stationed at Camp Elkwater, near Huttonsville, and Cheat Mountain. A battlefield memorial organization recently acquired ten acres of the Camp Elkwater site, and describe the battle on their website:

“Nearly 3,000 Federal soldiers were stationed here on September 12, 1861 when Confederates under General Robert E. Lee attacked. Failing in an assault on Cheat Mountain, seven miles east, Lee hoped to seize Camp Elkwater. (Lee wrote) “When morning broke, I could see the enemy’s tents on Valley River, at the point of the

Huttonsville road just below me,” ... “It was a tempting sight.” But the Tennessee troops under Lee’s command were too exhausted from their rugged march to launch an assault”. The armies skirmished instead. During the action on September 13.. General Lee...narrowly escaped capture. Foiled in his first campaign, Lee left “Western” Virginia with a tarnished reputation and a nickname: “Granny Lee.”^{xxi}

This was the first command for the Confederate leader General Robert E. Lee.

In late July 1861 Congress had authorized an additional 500,000 volunteers. This was the first such increase since the 75,000 cap had been authorized early in the 19th century. The History of the US Army (accessed online) describes how this order caused a need for more organization of supplies:

By Section 2 of an act entitled "An Act for the better organization of the Military Establishment," approved August 3, 1861, the Subsistence Department was increased by the addition thereto of "four commissaries of subsistence, each with the rank, pay, and emoluments of a major of cavalry; eight commissaries of subsistence, each with the rank, pay, and emoluments of a captain of cavalry, and to be taken from the line of the army, either the volunteers or the regular army."^{xxii}

After General Reynold’s resignation in 1862, Lieutenant Isaiah B. McDonald was transferred to the staff of General Robert H Milroy, as a Commissary of Subsistence and would be appointed one of the eight Captains of Commissary of Subsistence by President Lincoln in April 1862.

McDonald was serving under General Milroy during the campaign culminating in the 2nd Battle of Bull Run in August 1862. The work of the Commissary of Subsistence continued to be an important component of the health and care for soldiers. Captain Isaiah B. McDonald was also responsible for “soldiering” along with his duties to provide and protect the subsistence food and medical supplies for General Milroy’s troops.

At Catlett’s Station, on August 22, 1862, General Pope's headquarters and trains were captured, sacked and burned by Confederate Gen. J. E. B. Stewart. Stewart and his troops then moved on to the train cars loaded with General Milroy’s supplies, and Colonel McDonald had only ninety-

four men with whom to fight off the enemy during a terribly stormy night. Hundreds of Union soldiers were captured in this battle. A correspondent to the Philadelphia Inquirer wrote as follows:

"During the onset of the rebels, after the wagons of Pope's train had been fired, they started from the road to where Gen. Milroy's trains lay, intending to pay their attention to them, but they were promptly met by a guard of about one hundred men, headed by the gallant Capt. I. B. McDonald, Commissary of Milroy's brigade. His bravery and determination saved the train..." (The article included a letter from General Milroy): "I am at this place with nearly half my command...Capt. I. B. McDonald, my Commissary, is with me, and is the only staff officer of my command who saved all his papers and money. His conduct in the battles of Sunday and Monday last was most gallant and praiseworthy, and any promotion you can give him would be well deserved and most gratifying to me. He would make a splendid Colonel..."

[Signed) R. H. MILROY, Major General.^{xxiii}

General Milroy's recommendation was well received, and McDonald was promoted to Colonel following his actions during the battle at Catlett's Station. He also continued in his role as Commissary.

By September 1862, the Sanitary Commission had begun organizing Union-wide effort to provide safe and clean conditions for soldiers and injured for both the US armed forces and the state volunteer units. Dorothea Dix had her Army nurses trained and deployed, and both the Union and Confederacy were using new technology, including telegraphs and railroads. Then, during September 1862 Major Johnathan Letterman implemented his new plan for ambulance corps at the Battle of Antietam.

The National Museum of Civil War Medicine notes the importance of this moment:

Major Letterman's innovative plan for medical organization and evacuation ... faced its first test on America's bloodiest day at Antietam...On the battlefield, assistant surgeons were to establish aid stations in close proximity to the battlefield in order to provide life-saving first aid and organize the evacuation of wounded soldiers to the rear for

further treatment or surgery. Medical personnel evaluated each patient and ensured that those with severe, treatable wounds received the first attention of surgeons further in the rear. Today, we call this triage.

..At Antietam on September 17, 1862, Major Letterman put his plan into action. The results spoke for themselves: more than 10,000 wounded Union and Confederate soldiers were evacuated from the blood-soaked battlefield within 24 hours of the end of hostilities, a stark contrast to earlier Civil War battles when wounded soldiers languished on the battlefield for days after the fight. Letterman's system worked, effectively removing the wounded from the battlefield in a timely fashion.^{xxiv}

By the beginning of 1863 the Sanitary Commission was in good order. Frederick Law Olmsted had created a large organization with "tens of thousands of citizens volunteering their services to more than seven thousand local affiliates spread throughout the cities, towns, and villages of the North."^{xxv} The historian Rutkow described Olmsted's efforts:

From September 1862 until May 1863, when army physicians officially approved by Congress took over the function, Olmsted sent dozens of experienced medical men into the field as sanitary inspectors. ..these men were instructed to focus on sanitation and prevention. They reported on hospital locations and the nature of the soil and drainage... and the quality and quantity of food available...They counted blankets and clothes, and noted the condition of tents...what drew the most public praise for the Sanitary Commission were the relief efforts to aid the soldiers...The thousands of local organizations, usually supervised by women collected, stored, and shipped...all manner of baked goods, bandages, blankets, canned foods and clothing...The Sanitary Commission distributed its donations on such a massive scale that it was sometimes difficult to discern which was the soldier's primary source of supplies, the federal government or the commission.^{xxvi}

Southern efforts were not as effective, although many advances were made by Confederate troops that mirrored efforts in the north. Samuel Preston Moore served as Surgeon-General of the Confederate States Army Medical Department, and successfully improved the ambulance

corps, directed the construction of new hospitals, and designed the barracks model of hospital design still in use. A recent article about his efforts in the *American Journal of Surgery* notes that “With skill and dedication, Dr. Moore transformed the medical corps into one of the most effective departments of the Confederate military and was responsible for saving thousands of lives on the battlefield.”^{xxvii}

Physician Esther Hill Hawks found medical work in Union-controlled South Carolina following the refusal of Dorothea Dix to add her to the nursing staff:

Undaunted, Hawks volunteered in Washington hospitals until she was offered a teaching position with the Freedmen’s Aid Society in 1862. In that capacity she arrived on the Sea Islands of South Carolina where her husband was serving as a physician... In April 1863 she joined her husband at the newly established hospital for people of color in Beaufort where she both nursed and taught her patients...Away from the prying eyes of Washington, she utilized her medical skills and supervised the hospital during her husband’s frequent absences, which could last as long as three weeks. (occasionally serving as surgeon and administrator), Hawks doubted she would have been allowed such authority “if my brother had not been hospital steward—or if the patients had been white men.” She continued to work in the hospitals and freedmen’s schools of South Carolina and Florida throughout the remainder of the war.^{xxviii}

During the Battle of Chancellorsville, Virginia, on May 2, 1863, the Confederacy won a major battle, but lost their best soldier. On May 2, Stonewall Jackson took his 30,000 troops and launched a surprise attack against the Union, driving the opposing troops back about two miles. That evening he was accidentally shot by Confederate pickets. As mentioned at the beginning of this paper, I promised to avoid discussion of amputation and its side effects until after the dessert course.

Rutkow describes his wound: “Accidentally shot in the left arm by one of his own men, and suffering from massive blood loss and splintering of the bone, Jackson was forced to submit to the amputation of his arm two inches below the shoulder. For eight days he fought for his life,

but without the benefit of surgical antisepsis and antibiotics, he died from pneumonia and blood poisoning.^{xxix}

The 1852 Medical Book describes the surgical procedure for amputation above the elbow. There is also a handy illustration on page 479:

The elbow should be separated from the side, and a tourniquet applied, or pressure made with the hands; the arms should be transfixed three inches above the external condyle with a suitable knife, which should be carried obliquely downwards and forwards, so as to make the inner surface of a semilunar flap two or three inches in length; divide the opposite side in the same manner; draw the two flaps upwards, pass a knife around the bone, which should next be sawn through, and the removal is finished. The arteries should be secured, and the flaps brought in contact and retained by the proper dressings.^{xxx}

From June 13 to 15th, 1863, Captain of the Commissary Isaiah B. McDonald fought in the 2nd Battle of Winchester, Virginia. Confederate troops under the command of Richard S. Ewell, now leading Stonewall Jackson's troops were heading north towards Gettysburg and made an attack on the Union-held fort at Winchester. In the *Report of Maj. Henry Peale, Eighteenth Connecticut Infantry, Second Brigade, of operations June 13-15*, Major Peale writes:

“The rebels took possession of a large house within rifle distance of the regiment, and annoyed it severely, delivering their fire whenever a head showed itself above the rifle-pits. It was resolved to dislodge them, and a 24-pounder brass howitzer was procured from the fort and turned upon the building. The gun was served by Captain [Isaiah B.] McDonald, of the commissary department. After the firing of several shots, some of which penetrated it, a portion of the regiment, Companies F and H, under Captain Bowen, of the latter company, charged, and captured 8 prisoners, the rest making their escape.”^{xxxi}

Eliza Hamilton George, a widow from Fort Wayne, applied to the Indiana Agent of the Sanitary Commission to serve as a nurse in 1863. At first rejected due to her age—over 54—she made the case for herself, as quoted in an 1866 article: “I am old; but my health is good, and I desire

to do something for those who every day expose their lives for our country. If unable to go through as much as some, I will engage never to be at all troublesome on in the way.”^{xxxii}

Mother George began her military service in Memphis, and travelled to Corinth, Mississippi, before being assigned to a hospital in Pulaski, Tennessee. There, along with another well-known nurse, Mary Ann Bickerdyke, they organized a hospital for Union soldiers during the campaigns at Chattanooga and Look Out Mountain. William Flearry, Surgeon for the Illinois 12th, and the director of the hospital at Pulaski, sent a letter to the Fort Wayne Ladies Soldier’s Aid Society, lauding the work of Mrs. George.

It was my fortune to have charge of the Pulaski General Hospital in its infancy. During several weeks of this time more than a hundred brave men prostrated by disease and wounds were without change of beds, or bed clothes in which deplorable conditions several died. But for the appearance of Mrs. George and her sanitary stores, I know not how long this distress must have continued. Stores that she had guarded during an entire week...of inclement December weather during their tedious passage from Nashville, but I do know that her arrival wrought a Christian miracle – that scores of languishing soldiers were suddenly purified and clad in garments of sufficient elegance and great comfort.^{xxxiii}

Mrs. George continued to work at the western front and was in Nashville during the winter of 1864 while it was under siege. Along with several other nurses, they opened a hospital. She wrote her last letter home on December 8, 1864:

“The wind is whistling round the house, the cannon booming in the distance and my heart is aching for the houseless, homeless, destitute women whose husbands are in the Union Army, fighting for their country’s life... You know how like a cool draught of water to a thirsty soul, is a letter to me from home; and you know I would write if I could, but my time is not my own.”^{xxxiv}

She returned home to Fort Wayne briefly in the beginning of 1865, and then traveled to Washington DC to receive another assignment, meeting with Dorothea Dix. Dix urged Mrs. George to go to Wilmington, North Carolina, where Union forces had just taken the city. Casualties were high and medical assistance needed, according to her biographer. ^{xxxv}

She reached Wilmington at the same time that 11,000 Union prisoners were released from the nearby Andersonville Prison, and transferred to Wilmington. George worked at several tasks, including supervising the manufacturing of clothing, and nursing the injured. She soon was exposed to typhoid fever, and preparations were made for her to return to Fort Wayne. However, she died on May 9, 1865.^{xxxvi}

The American Civil War was horrific. It tore the country apart, caused the deaths of over 600,000 young men, and divided families. Millions who fought and lived had to deal with chronic illnesses, or challenges due to the loss of arms, legs, hands, or feet. The war also ended legal slavery anywhere within the nation, giving almost four million people their first taste of freedom. It provided new opportunities for women to serve in the military and transformed nursing into a professional career.

Considering the fact that germ theory would not be accepted widely until after the war, and sanitizing and sterilizing surfaces with carbolic acid would not be discovered by Joseph Lister until 1870, Civil War physicians and nurses succeeding in keeping deaths to less than 10% of all who were treated.

Organizational advances recommended by Frederick Law Olmsted and its execution by the Sanitary Commission were paramount in creating the beginnings of modern approaches to large-scale relief efforts utilizing volunteers. Although the Sanitary Commission was disbanded shortly after the war ended, the American Red Cross took on many its activities, and remains an important responder when tragedy strikes.

And whatever became of the gallant Isaiah B. McDonald? We'll end with his Biography as told in the Whitley County history of Kaler and Maring:

Colonel McDonald was slightly wounded twice but was not disabled from service an hour. ...After his return from the army he once more entered public life in the service of the people, being school examiner of Whitley county from November 1864, to December 25. 1870, and on the date last given became a member of the lower house of

the state legislature... In 1886, he was elected to the (state) senate from Allen and Whitley counties...He was chairman of the military committee in the senate, and as such put through the bill providing for the erection of the Soldiers' Monument and carrying an appropriation of two hundred thousand dollars for the purpose of starting the monument... He afterward secured by a unanimous vote from the Indiana department of the Grand Army of the Republic an appropriation of nineteen thousand dollars for the foundation of this monument.

Other legislation of great importance of which he may properly be styled the father, was the law locating the school for feebleminded children at Fort Wayne, which he secured the passage of after a stubborn fight, and the reorganization of the Knightstown Soldiers' Orphans' School. ^{xxxvii}

ⁱ Robert F. Reilly, MD. "Medical and surgical care during the American Civil War, 1861–1865." In *Baylor University Medical Center Proceedings*, 2016 Apr; 29(2): 138–142. Accessed online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4790547/>

ⁱⁱ "*Counties of Whitley and Noble, Indiana. Historical and Biographical*" by Weston A. Goodspeed and Charles Blanchard. Published by F.A. Battey & Co., 1882

ⁱⁱⁱ *ibid.* See also Mitchell, Dawn. "Hoosier women aided Civil War soldiers." *Indianapolis Star*, March 23, 2015. Accessed online 2/24/19 at <https://www.indystar.com/story/news/history/retroindy/2015/03/23/hoosier-women-aidedcivil-war-soldiers/70321670/>

^{iv} Schwartz, Gerald, ed. *A Woman Doctor's Civil War: Esther Hill Hawk's Diary*. University of South Carolina Press, 1984, 1989.

^v Medical Training in the United States Prior to the Civil War* Robert G. Slawson, MD, *FACR1: Journal of Evidence-Based Complementary & Alternative Medicine* 17(1) 11-27 ^ª The Author(s) 2012:

^{vi} *A Biographical History of Eminent and Self-made Men of the State of Indiana*. Western Biographical Publishing Company, 1880. Accessed online.

^{vii} Goodspeed and Blanchard; see also Kaler, S.P. and R.H Maring, *History of Whitley County, Indiana*. B.Bowen & Co., 1907.

^{viii} Rutkow, Ira M. *Bleeding Blue and Gray: Civil War Surgery and the Evolution of American Medicine*. Random House, 2005.

^{ix} *ibid.*

^x Denney, Robert E. *Civil War Medicine*. New York, Sterling Publishing Company, 1995.

^{xi} *ibid.*

^{xii} *ibid.*

^{xiii} Rutkow.

^{xiv} *Ibid.*

^{xv} Schwartz.

^{xvi} Rutkow.

^{xvii} Mendenhall, George, M.D. *The Medical Student's Vade Mecum*. Third edition. Philadelphia, Lindsay and Blakiston, 1852. .

^{xviii} *ibid.*

^{xix} Rutkow.

^{xx} *ibid.*

^{xxi} Rich Mountain Battlefield News, accessed 2/26/19 at <http://www.richmountain.org/news/elkwater07.html>

^{xxii} BVT. BRIG.-GEN. John W. Barriger, Assistant Commissary General U. S. ARMY: "The Subsistence Department," in *The Army of the US Historical Sketches of Staff and Line with Portraits of Generals-in-Chief*. Accessed online 2/1/19 at <https://history.army.mil/books/R&H/R&H-Sub.htm>

^{xxiii} Goodspeed and Blanchard.

^{xxiv} National Museum of Civil War Medicine. Accessed online 2/26/19 at <http://www.civilwarmed.org/evacuation-2/>

^{xxv} Rutkow.

.

^{xxvi} *ibid.*

^{xxvii} Purcell, Peter N. et al., "Samuel Preston Moore: Surgeon-general of the confederacy." *The American Journal of Surgery*, Volume 164 , Issue 4 , 361 – 365. Accessed online.

^{xxviii} The South Carolina Encyclopedia, accessed 2/27/19 online at <http://www.scencyclopedia.org/sce/entries/hawks-esther-hill/>

^{xxix} Rutkow.

^{xxx} Mendenhall.

^{xxxi} Report of Maj. Henry Peale, Eighteenth Connecticut Infantry, Second Brigade, of operations June 13-15.

^{xxxii} Moore, Frank, *Women of the War*, published in 1866, and cited in Sadler, Hilary A. *Mother George: Fort Wayne's Angel of Mercy*. *Old Fort News*, Vol. 27, no. 4, October-December 1964.

^{xxxiii} *ibid.*

^{xxxiv} *ibid.*

^{xxxv} *ibid.*

^{xxxvi} *ibid.*

^{xxxvii} Kaler and Maring.