

“The Folly... Of Silly Women”: How Women Advanced American Medicine During the Civil War

Sarah Chamness
Christ College
Valparaiso University
1700 Chapel Drive
Valparaiso, Indiana 46383 USA

Faculty Advisor: Dr. David Western

Abstract

Scholarship on Civil War medicine has traditionally focused on the incompetent practice and limited knowledge of the medical professionals at the time, which resulted in a horrific number of casualties. Such work has led to a historical understanding of the Civil War as the sort of ‘Dark Ages’ of American medicine. However, recent scholarship suggests that this perception ignores significant strides in research and scientific thinking that took place during the time period. In her book *Learning from the Wounded: The Civil War and the Rise of American Medicine*, published in 2014, historian Shauna Devine argues that the Civil War was not a medical dead-end but rather a catalyst for innovation that fundamentally altered medical practice. According to Devine, the war led directly to the development of modern medicine in America through the efforts of individuals such as U.S. Surgeon General William A. Hammond. Though Devine’s argument is an important correction of previous scholarly consensus, her argument focuses very heavily on the experiences of Northern male doctors. This paper argues that, contrary to this male-centered vision of modern medical development in America, women provided a massive contribution to the shift in medical practice that occurred during the Civil War, including the creation of the United States Sanitary Commission, an organization that advocated for the policy changes that aided modern medical development during the Civil War. In addition, female nurses and doctors pioneered many of the ideas and practices that influenced such significant male modernizers, including William Hammond. This paper will demonstrate that the contributions of women to the development of modern American medicine during the Civil War were every bit as pivotal as those of men.

Keywords: Women in medicine, Civil War, American Medicine

1. Introduction

It was Cornelia McDonald’s first day at work. A housewife and mother from the town of Winchester, Virginia, McDonald had decided to help out at the local hospital, which was already overflowing with wounded Confederate soldiers.¹ The supervising surgeon asked her to wash the cut on one of his patient’s faces; on her way to do so, she staggered backward in horror after tripping over a pile of amputated limbs.²

McDonald’s story, similar to many other anecdotes from Civil War hospitals, is both gruesome and a little comical; in other words, a good example of the way that American medicine during the Civil War era is often depicted. For most of us, the phrase “Civil War medicine” conjures up images of screaming, thrashing soldiers, surgeons wielding dirty, bloody knives, and piles of freshly-severed limbs lying on the ground outside hospital tents. This impression was created and sustained by popular and historical descriptions of the Civil War alike. In Geoffrey C. Ward’s book *The Civil War: An Illustrated History*, based on Ken Burns’s popular documentary of the same name, an interview question refers to the Civil War as the “medical middle ages” – a description of the Civil War that has been repeated in many sources, both popular and scholarly, throughout the years.³ Historian George Worthington Adams’s book

Doctors in Blue: The Medical History of the Union Army in the Civil War, for example, uses the same phrase, stating: “the Civil War took place at the very end of the medical “middle ages”.”⁴ Descriptions such as these in both popular and academic works contributed to making the collective historical impression of Civil War medicine a negative one. And in many ways, that impression is correct; reading about medicine during that time period is disturbing to those of us who are used to sanitary hospital beds, anesthesia that is not very likely to kill us, and doctors who wash their hands in between patient visits. However, at the time of the Civil War, that horror story was the reality of American medicine. An estimated 27% of Union soldiers who underwent an amputation died.⁵ Diseases such as dysentery and typhoid fever were common because of poor sanitation in the army campsites, and a single case of gangrene could spread to encompass an entire hospital ward.⁶ Even the smallest wound could be a death sentence.

Nevertheless, despite the inadequate state of medical care during this time period, Civil War medicine was much more important to American medical history than was previously thought. Some of the latest research into this period has revealed that the Civil War was arguably the catalyst for the modernization of medicine in America. According to historian Shauna Devine’s 2014 text, *Learning from the Wounded: The Civil War and the Rise of American Medical Science*, significant strides toward modernization were made during the time period of the Civil War. The book focuses on the advancements of prominent Northern doctors and medical administrators as well as the general shift in attitude of the time from an individualistic approach to medicine, treating each patient differently for the same disease, towards a scientific approach to improving medicine. This shift was stimulated by the Union Surgeon General William A. Hammond’s push to systematize medical research which led doctors to treat diseases the same way in each patient, resulting in more accurate diagnoses and improved patient results.⁷ Before the war, medical practice was not standardized, and the horrific conditions of the hospitals at the beginning of the war reflected the antebellum ignorance of the doctors who populated them. Many states did not even have licensing laws, and physicians disagreed on issues ranging from how to cure cholera to how diseases spread.⁸ The overflowing hospitals and massive numbers of wounded may have left a negative impression of Civil War medicine in our collective national conscience, but these same terrible circumstances revealed to American doctors how little they actually knew, causing a surge of scientific inquiry that, supported by such institutions as the Army Medical Museum, radically altered the direction of American medicine.⁹ The Civil War, Devine argues, was not the medical dead-end that we tend to think of, but was really the beginning of our movement as a country towards medical modernity.

Although Devine’s argument is persuasive, it is also too narrow. *Learning from the Wounded* focuses almost exclusively on the achievements of men, arguing that these achievements were what drove the development of modern medicine in America. While that is undoubtedly true, the influence of women during and after the Civil War was crucial to medicine’s modernization. Because of the gender bias of the time, it was harder for such women as the British nurse Florence Nightingale, an ardent proponent of sanitation and a respected author of several books on nursing and hospital reform, and Elizabeth Blackwell, a health care reformer and female doctor, to have their ideas recognized as modernizing advances; but their influence on such figures as Hammond cannot be denied. Women led the initial push to form the United States Sanitary Commission (U.S.S.C.) at the beginning of the Civil War, and Hammond took many of his ideas regarding hospitals, the collection and dissemination of medical knowledge, and the application of the scientific method to medical practice, from Florence Nightingale’s work during the Crimean War.¹⁰ Although the administration was taken over by men at the national level, many of its ideas about proper hygiene and sanitation came from women, and many of the positions within the agency were held by women.¹¹ These contributions, however, have largely been overlooked in favor of highlighting women’s more passive, supporting roles in Civil War medicine as members of Ladies’ Aid Societies or as nurses like the fainting Cornelia McDonald, when the reality is that women like Blackwell and Nightingale were active participants in the medical field who recognized the knowledge gap among male doctors and campaigned for better medical practices, paving the way for the development of American medicine as we know it.

2. The Importance Of William A. Hammond

Devine’s argument fails to explore the ways in which women affected the intellectual climate of the medical field at the time of the Civil War, instead focusing on the experiences of the male doctors in the North. Inexperienced and poorly educated, the majority of doctors had never set foot in a hospital until they were thrown in among the wounded Northern soldiers.¹² They were used to rural practices, where they made home visits and knew every patient by name, and they quickly realized that they were horribly unprepared for the medical emergencies of the war wounded, especially since there was no systematic way of understanding and treating disease. Before the war, physicians were divided on the issue of how disease was transmitted. Some thought that dirty environments caused illness: others, that diseases could be spread from person to person: others, that a person only contracted illnesses due to some inherent

weakness in “constitution.”¹³ This wide range of belief systems existed because doctors were used to thinking about disease in terms of individuals; in other words, the same exact disease could be treated two completely different ways depending on the patient.¹⁴ But these physicians suddenly found themselves in an environment that encouraged research and experimentation. Simply because there were so many patients collected under one roof, doctors had the opportunity to observe firsthand the spread of disease and the actual effectiveness, or ineffectiveness, of their treatments on a massive scale. Many even ran experiments or tried brand-new, untested treatments on their patients, either in an effort to save their life or simply because they were curious.¹⁵ Northern physician Benjamin Woodward, for example, in an attempt to determine whether or not gangrene is contagious, took a sample of the air very close to an infected wound, cultured the bacteria, stuck those bacteria into the uninfected wound of another soldier, and then put that soldier into isolation. Sure enough, that soldier developed gangrene.¹⁶

Besides the sheer number of wounded, another crucial factor in the development of these opportunities for physicians to perform research and expand their medical views were the reforms of William A. Hammond. It was Hammond who called for the mass construction of hospitals, encouraged autopsies and the writing of case reports, and created the Army Medical Museum in Washington, D.C., a treasure trove of medical knowledge to which physicians were asked to send specimens and detailed descriptions of their latest medical insights.¹⁷ Hammond encouraged the systematic collection of data and a more scientific way of thinking among the medical community. Between the support of the government and the new learning opportunities provided by Union hospitals, it is no wonder that the mindset of medical personnel shifted away from guesswork and towards scientific inquiry during the Civil War.¹⁸

Most of Devine’s argument focuses on the effects of Hammond’s time as U.S. Surgeon General. She acknowledges that he was responsible for most of the reforms that she discusses as important to modernizing American medicine: “Hammond’s energetic approach to wartime medicine included the formal restructuring of the medical department; the development of a national military hospital system; the creation of chemical laboratories; improved record keeping; the hiring of female nurses, storekeepers, washwomen, and medical cadets to meet the demands of war; and the introduction of specialty hospitals.”¹⁹ Devine seems to see his election to the post of U.S. Surgeon General as the turning point - the critical moment that allowed for the advancements in American medicine that were to come. But what if it had never happened? The two Surgeon Generals before Hammond, Thomas Lawson and Clement Finley, were both older, traditional practitioners who were suspicious of any attempts to reform the Medical Bureau. In fact, they were against the basic scientific principles upon which Hammond based all of his work. Under these two men, soldiers were dying left and right. There was no ambulance corps, no network of volunteers (women or otherwise), and only a very few, poorly-run hospitals.²⁰ Without legislative action, there was little likelihood that such terrible conditions were going to change anytime soon, because the appointment of surgeon general was based on seniority instead of merit.²¹ Appalled by the state of medical care in the army, the U.S.S.C. drafted a bill that would allow the appointment of a new surgeon general based on merit so that Finley could be replaced with Hammond, a much more forward-thinking practitioner. They lobbied for it unceasingly until Finley retired and it was finally passed, giving Hammond his chance to re-structure the Medical Bureau.²² So just as Hammond would not have obtained his post without the existence of the U.S.S.C., the U.S.S.C. would never have existed at all without women’s efforts.

3. Women And The U.S.S.C.

The U.S.S.C., an organization that arose largely from the efforts of women, was the cause of Hammond’s appointment and arguably the true catalyst of the rise of modern American medicine as well. One could even argue that the men who are credited with the U.S.S.C.’s foundation were not its founders at all, and that its true founders were women: Elizabeth Blackwell and Dorothea Dix.²³ Elizabeth Blackwell was a prominent health reformer and, more rarely, a practicing doctor with a medical degree.²⁴ Interested not just in assisting the Union soldiers but also in advancing the participation of women in medical science, Blackwell created the Women’s Central Association of Relief (W.C.A.R.).²⁵ At their very first meeting on April 29th, 1861 in New York city, the brand-new organization clarified its three central goals: to organize the relief efforts of Northern women, to communicate with (and even criticize or reform if necessary) the Medical Department, and to train women to be nurses in Union hospitals.²⁶ In an attempt to secure official recognition from the government, the W.C.A.R. sent its vice-president Henry Bellows to Washington.²⁷ (Though it was primarily a women’s organization, and Blackwell was its founder, Blackwell also recognized the need to have male support and leadership in order to have any hope at being officially recognized.)²⁸ But Bellows’s proposal was met largely with apathy; the members of the Medical Department apparently saw little, if any, good that would come from organizing the efforts of Northern women.²⁹

Unwilling to give up on the W.C.A.R., Bellows remained in Washington to decide how best to approach the government a second time. Unsure of how to proceed, he welcomed the advice of another woman, Dorothea Dix.³⁰ A respected medical reformer, already known for her work improving insane asylums, Dix had established herself in Washington and was attempting to organize women as nurses.³¹ She was thus a powerful ally for the W.C.A.R. – and, after the initial proposal failed, she worked with Bellows to draw up a new proposal, this time for an organization called the United States Sanitary Commission.³² The proposal for the U.S.S.C. was strikingly similar to that of the W.C.A.R., but without some of the more obvious feminist elements. Focusing much more heavily on aiding and reforming the Medical Department, and committing only to investigating how women might be able to serve as nurses, the proposal for the U.S.S.C. was accepted.³³ One of its new functions was to keep in check the over-excited, counter-productive impulses of the Northern women who wished to set up aid societies but could actually, according to the men who proposed the U.S.S.C., end up hurting more than helping due to their over-enthusiasm; a goal that would have seemed ironic to anyone who knew the true origin of the U.S.S.C., since it was a group of women who had provided the impulse for the organization.³⁴

To the extent that some members of government recognized women's connection to the U.S.S.C., this knowledge tended to inspire opposition to the organization. As historian Margaret Humphreys argues, the very idea of keeping cleaner army camps and imposing sanitary requirements on hospitals was seen as specifically feminine.³⁵ The motives of the organization were often questioned, and the War Department didn't think the organization would live very long; one member referred to it as "the folly of weak-minded enthusiasts and silly women."³⁶

Although the influence of women on the formation of the U.S.S.C. was often seen as a weakness, many men did acknowledge said influence during and after the Civil War. *Woman's Work in the Civil War: A Record of Heroism, Patriotism, and Patience*, a book written immediately after the war whose purpose is to champion the efforts of women but is also clearly infused with the strict gender bias of the time, acknowledges that the W.C.A.R. gave rise to the U.S.S.C., referring to the W.C.A.R. as "the germ of the Sanitary Commission."³⁷ Clearly, though the actual proposal for the U.S.S.C. came from men, the ideas behind it came from women, and it might never have come into being without the efforts of Elizabeth Blackwell and Dorothea Dix.

Although men were in charge of organizing the U.S.S.C. on the national level, on the regional level, it was women who were almost exclusively responsible for the organization's operation. According to historian Judith Ann Giesberg's work *Civil War Sisterhood: The U.S. Sanitary Commission and Women's Politics in Transition*: "there were commission branches in New York, Boston, Philadelphia, Cleveland, Cincinnati, Chicago, Louisville, Pittsburgh, Buffalo, New Albany, Detroit, and Columbus," all run by women.³⁸ These branches were also largely independent, even though they were supposed to follow the orders of the leaders in Washington. Giesberg even argues that: "in practice the reverse was often the case – the executive board often deferred to the branches in matters of day-to-day operation."³⁹ On the local level, *Woman's Work* celebrates the achievements of the women who ran Soldier's Homes and Ladies' Aid Societies affiliated and organized under the U.S.S.C.⁴⁰ The W.C.A.R. also remained active and was eventually accepted and recognized officially as a branch of its offspring organization, the U.S.S.C.⁴¹

4. Hammond And Florence Nightingale's Influence On Medical Reform

As has already been stated, one of the most important results of women's influence on the U.S.S.C. was the introduction of William A. Hammond into the office of Union Surgeon General. Hammond's reforms promoted a scientific, statistical mode of thinking very different from the way American surgeons were used to viewing medicine. Hammond wanted to encourage a more scientific approach to thinking about illness so that doctors could start curing them accurately and consistently, instead of trying treatment after treatment until one actually worked. Throughout the course of the war, Hammond would often instruct physicians to submit case reports and study in depth one particular disease such as gangrene or erysipelas.⁴² As a result of their studies and experiments, performed to comply with Hammond's request, many physicians found that the evidence simply did not support their viewpoint on the development and spread of disease, and they were forced to change it.⁴³ Many also began to suspect that theories about "specific contagions" (microorganisms) were correct, and in general there was a shift away from customizing treatment for each individual towards customizing treatment for each disease.⁴⁴ Hammond believed that medical science should be based on cold, hard, observable facts, and through his reforms, this mode of thinking trickled down into the hospitals under his care and infused the physicians working there, causing a fundamental shift in the way physicians thought about how to improve medical care. In short, they were beginning to value science.

Yet here, once again, the ideas driving Hammond originated from a woman: Florence Nightingale. Nightingale was disgusted by the conditions that soldiers suffered in army hospitals during the Crimean War. Out of her experiences

during came a lifetime of research and reform work that would land Nightingale a legacy as the founder of modern nursing.⁴⁵ Though the American Civil War began less than a decade after the Crimean War, Nightingale was already famous and respected in America by that time.⁴⁶ She had already written two books based off of her experiences during the Crimean War, *Notes on Nursing* and *Notes on Hospitals*, both published in the U.S. in 1860 and both of which were extremely popular in America when the first shots were fired at Fort Sumter.⁴⁷ Though Nightingale received fame in both Britain and America for her work on nursing and public health, her medical innovations clearly had not yet become common practice in America, most likely due to the same prejudice against women as sources of medical knowledge that caused many men in government to remain skeptical of the U.S.S.C.

Yet, as an educated physician, William A. Hammond's own approach to medicine seemed to be almost a carbon-copy of Nightingale's general scientific philosophy. Moreover, according to historian Susan-Mary Grant, Hammond was aware of her influence on his own reform work.⁴⁸ For example, under Hammond the Union finally began constructing new hospitals to house the thousands of wounded soldiers. Many of them were built in the pavilion style that Nightingale specifically advocated in her work *Notes on Hospitals*.⁴⁹ The idea of a pavilion hospital was not to have one big building, but rather a series of smaller buildings housing a smaller number of patients, though still run under a central administration.⁵⁰ Since Nightingale was extremely concerned with hygiene and the importance of fresh air, this design made it easier to adequately ventilate each ward and prevent horrible over-crowding.⁵¹ The U.S.S.C. recommended this type of construction after touring the few military hospitals that existed before Hammond's appointment; Hammond agreed, and he began building pavilion hospitals soon after becoming Surgeon General.⁵²

Florence Nightingale also had a specific way of approaching medical research in a statistical, scientific manner that was virtually copied by her contemporaries, including Hammond and the members of the U.S.S.C. In her book *Florence Nightingale at First Hand*, historian Lynn McDonald presents a condensed list of "steps" that she terms the "Nightingale method" to approaching medical science.⁵³ According to McDonald, the first step in research the Nightingale way is to gather "the best information available," followed by further investigation through the use of tools like questionnaires, the end goal being to publish and disseminate one's findings as widely as possible for others' use.⁵⁴

This checklist reads like a description of the normal working method of both Hammond and the U.S.S.C. For instance, after the Battle of Bull Run, the U.S.S.C. put considerable effort into analyzing the state of the Union army and the soldiers who had fought in the battle. How did they do so? By sending around a questionnaire. The leader of the U.S.S.C., Frederick Law Olmsted, used the data his inspectors had gathered to write a detailed *Report on the Demoralization of the Volunteers* that he hoped to use to criticize and provoke reform of the Medical Department.⁵⁵ Hammond's method of working could also be closely compared to Nightingale's. He, too, was interested in gathering as much information as possible in order to draw educated, well-informed conclusions based on real data to advance the field of medicine. He accomplished this, as has already been discussed, through such reforms as the establishment of the Army Medical Museum, which quickly became a massive stockpile of medical data and an invaluable teaching and research tool for American physicians.⁵⁶

Florence Nightingale's ideas were simply reflected everywhere in the medical changes that took place during the Civil War; Humphreys goes so far as to call her "the single greatest influence on Civil War hospitals and the people who worked in them."⁵⁷ Grant seems to agree, at least to a certain extent, claiming that a lot of the reforms promoted by Hammond and the U.S.S.C. "clearly derived from the work done by Florence Nightingale."⁵⁸ Many of the women who served as nurses or part of the U.S.S.C. and other aid societies did so because they were inspired by her example, and she was a personal role model for both Elizabeth Blackwell and Dorothea Dix.⁵⁹

And Nightingale's influence was universal within the United States, not just a Northern phenomenon. The Confederacy, too, took advantage of some of her ideas. Since the Union didn't develop any pavilion style hospitals until 1862, after Hammond was installed as Surgeon General, it was actually the Confederacy who built and operated the very first pavilion hospital in the U.S.⁶⁰ Chimborazo Hospital, located in Richmond, Virginia, was specifically constructed along the guidelines that Florence Nightingale advocated. It was located on top of a hill, and angled so that the wind would blow through it, which helped to provide adequate ventilation.⁶¹ In addition, since the wells used as a water supply were dug on top of the hill, they were protected from being contaminated by any run-off from the hospital.⁶² By the time construction on the hospital was finished, it had almost 100 separate wards laid out in the neat pavilion style that Nightingale liked so much.⁶³ Chimborazo turned out to be incredibly useful to the Confederacy, and its success and the success of similar hospitals in both the Union and the Confederacy helped to popularize the pavilion style.⁶⁴ Clearly, the impact of Florence Nightingale's ideas on the development of a more scientific, more modern approach to medicine in America was more significant than is suggested by *Learning from the Wounded*, in which she is not even mentioned.

5. Conclusion

The end of the war brought the end of the U.S.S.C. and most of the Ladies' Aid Societies that were so instrumental to the Union army. But even as these old organizations were dismantled, new ones were being built, and the ideas of these women lived on to influence the development of American medicine for years to come. Though the U.S.S.C. was ultimately abandoned, it inspired the founding of the Red Cross.⁶⁵ After the war, a National Medical Library was also founded and doctors collaborated to write the extensive *Medical and Surgical History of the War of the Rebellion*, in the same spirit of inquiry and drive to centralize medical knowledge that Nightingale possessed and passed down to Hammond when he was Surgeon General.⁶⁶ The Army Medical Museum continued to accept donations from doctors to further increase its store of knowledge.⁶⁷ Medical education started to shift away from lecturing and towards laboratory work and hands-on experience.⁶⁸ And in the next few decades, nursing schools such as the New York Training School at Bellevue Hospital, which were specifically inspired by the ideas of Florence Nightingale, established nursing as a viable profession for the first time in the U.S., and as a profession that was open to women.⁶⁹ America, though slowly, had finally begun to catch up to Europe.⁷⁰

But somewhere along the way, the contributions of women to the development of modern medicine in America were overlooked. While she was still part of the W.C.A.R., Elizabeth Blackwell wrote to a friend about her work, saying: "you will probably not see our names."⁷¹ Bizarrely enough, she was both right and wrong. *Woman's Work*, written right after the Civil War, includes an entire chapter on the W.C.A.R., celebrating the administrative achievements of the women involved and even giving Blackwell credit as the initiator of the organization that would give rise to the U.S.S.C.⁷² But somewhere along the way, this crucial piece of history was indeed lost. What is generally considered the seminal work on the influence of the U.S.S.C. during the Civil War, William Quentin Maxwell's *Lincoln's Fifth Wheel: The Political History of the United States Sanitary Commission*, does not entirely leave out Blackwell, Dix, and Nightingale from its description of the rise of the U.S.S.C. However, it focuses most of the attention and credit on Bellows without fully discussing the source of the ideas that he presented to the Medical Bureau.⁷³ And again, in *Learning for the Wounded*, while it presents an excellent description of the experience of Northern physicians and a compelling argument for the Civil War as the cause of the modernization of medicine in America, the source of the ideas behind this movement – women like Blackwell, Dix, and especially Nightingale – is simply not an important part of the discussion. Instead, tales like Cornelia McDonald's harrowing first day of work are what have survived as American women's medical legacy. But women were not passive participants in the movement towards modern American medicine; they were alert and engaged, and fought hard to bring the ideas of sanitation and science to the forefront of medical thinking. It is only within the past few decades that scholars have begun to really explore in depth the role of women in the Civil War, and understand what a deep impact they had, including the profound influence that they had on the development of more scientific, more professional, more modern medicine in the United States.

6. Acknowledgements

I would like to thank Dr. Samuel Graber for teaching a wonderful Civil War seminar and for helping to develop this paper. I would also like to thank Dr. David Western for agreeing to be my faculty sponsor, Professor Cynthia Rutz for offering feedback and accompanying us to NCUR 2016, and finally Mrs. Zromkoski, our fantastic Christ College secretary.

7. References

1 Mary D. Robertson, "A Woman's Civil War: A Diary, with Reminiscences of the War, from March 1862." *Journal of Southern History* 59 (1993): 559-561.

2 Jane E. Schultz, *Women at the Front: Hospital Workers in Civil War America* (Chapel Hill: University of North Carolina Press, 2004), 75.

3 Geoffrey C. Ward, *The Civil War: An Illustrated History* (New York: Alfred A. Knopf, Inc., 1990), 265.

4 George Worthington Adams, *Doctors in Blue: The Medical History of the Union Army in the Civil War* (Baton Rouge: Louisiana State University Press, 1952), 228.

- 5 Glenna R. Schroeder-Lein, "Amputation," in *The Encyclopedia of Civil War Medicine* (Armonk: M.E. Sharpe, 2008), 17.
- 6 Schroeder-Lein, "Diarrhea and Dysentery," "Infections, of Wounds," "Typhoid Fever," in *The Encyclopedia of Civil War Medicine*, 85; 160; 309.
- 7 Shauna Devine, *Learning from the Wounded: The Civil War and the Rise of American Medicine* (Chapel Hill: The University of North Carolina Press, 2014), 10-11.
- 8 *Ibid.*, 3-5; 100-101.
- 9 *Ibid.*, 21.
- 10 Margaret Humphreys, *Marrow of Tragedy: The Health Crisis of the American Civil War* (Baltimore: The Johns Hopkins University Press, 2013), 103; 46.
- 11 L.P. Brockett and Mary C. Vaughan, *Woman's Work in the Civil War: A Record of Heroism, Patriotism, and Patience* (Philadelphia: Zeigler, McCurdy & Co., 1867), 58.
- 12 Devine, *Learning from the Wounded*, 3-5.
- 13 *Ibid.*, 100.
- 14 *Ibid.*, 101.
- 15 *Ibid.*, 95.
- 16 *Ibid.*, 112.
- 17 Humphreys, *Marrow of Tragedy*, 298.
- 18 *Ibid.*, 95.
- 19 *Ibid.*, 15.
- 20 See Schroeder-Lein, "Ambulances" in *The Encyclopedia of Civil War Medicine*, 14; and William Quentin Maxwell, *Lincoln's Fifth Wheel: The Political History of the United States Sanitary Commission* (New York: Longman's Green, 1956), 52. Though Maxwell's book appears to contain some gender and racial biases, it is considered the seminal work on the U.S.S.C.
- 21 Devine, *Learning from the Wounded*, 13-15.
- 22 Humphreys, *Marrow of Tragedy*, 106-107.
- 23 Judith Ann Giesberg, *Civil War Sisterhood: The U.S. Sanitary Commission and Gender Politics in Transition* (Boston: Northeastern University Press, 2000), 23; 32-37.
- 24 *Ibid.*, 17-18.
- 25 *Ibid.*, 31-32.
- 26 See Brockett and Vaughan, *Woman's Work in the Civil War*, 527; and Giesberg, *Civil War Sisterhood*, 33.
- 27 See William Y. Thompson, "The U.S. Sanitary Commission," *Civil War History* 2, no. 2 (1956): 41-63; and Giesberg, *Civil War Sisterhood*, 34.
- 28 Giesberg, *Civil War Sisterhood*, 34.
- 29 *Ibid.*, 36.
- 30 *Ibid.*, 37.
- 31 *Ibid.*, 18, 35.
- 32 See Thompson, "The U.S. Sanitary Commission," 41-63; and Giesberg, *Civil War Sisterhood*, 37.
- 33 See Giesberg, *Civil War Sisterhood*, 38-39; and Thompson, "The U.S. Sanitary Commission," 41-63.
- 34 Giesberg, *Civil War Sisterhood*, 38.
- 35 Humphreys, *Marrow of Tragedy*, 69.
- 36 Quoted in Schultz, *Women at the Front*, 111.
- 37 Brockett and Vaughan, *Woman's Work in the Civil War*, 527.
- 38 Giesberg, *Civil War Sisterhood*, 5.
- 39 *Ibid.*
- 40 Brockett and Vaughan, *Women's Work in the Civil War*, 75.
- 41 See Schroeder-Lein, "Woman's Central Association of Relief" in *The Encyclopedia of Civil War Medicine*, 338; and Giesberg, *Civil War Sisterhood*, 56.
- 42 *Ibid.*, 97.
- 43 *Ibid.*, 100.
- 44 See Devine, *Learning from the Wounded*, 100; and Humphreys, *Marrow of Tragedy*, 26-27.
- 45 Lynn McDonald, "Florence Nightingale as a Social Reformer." *History Today* 56, no. 11 (2006): 9-15.
- 46 See McDonald, *Florence Nightingale at First Hand*, 69; and Susan-Mary Grant, "New Light on the Lady with the Lamp." *History Today* 52, no. 9 (2002): 11-17.
- 47 Humphreys, *Marrow of Tragedy*, 46; 63.
- 48 Grant, "New Light," 16.

- 49 Humphreys, *Marrow of Tragedy*, 46.
50 McDonald, *Florence Nightingale at First Hand*, 155.
51 Humphreys, *Marrow of Tragedy*, 46.
52 *Ibid.*, 47.
53 McDonald, *Florence Nightingale at First Hand*, 29.
54 *Ibid.*, 29.
55 Maxwell, *Lincoln's Fifth Wheel*, 23.
56 See Devine, *Learning from the Wounded*, 33-52.
57 Humphreys, *Marrow of Tragedy*, 63.
58 Grant, "New Light," 16.
59 Brockett and Vaughan, *Woman's Work in the Civil War*, 70; and Giesberg, *Civil War Sisterhood*, 23; 35.
60 Carol Cranmer Green, *Chimborazo: The Confederacy's Largest Hospital* (Knoxville: University of Tennessee Press, 2004), 18; 10.
61 Green, *Chimborazo*, 8; 10.
62 *Ibid.*, 12.
63 *Ibid.*, 10.
64 *Ibid.*, 18.
65 Maxwell, *Lincoln's Fifth Wheel*, 285-291; 314-315.
66 Devine, *Learning from the Wounded*, 250.
67 *Ibid.*, 263-264.
68 *Ibid.*, 252.
69 See Mary T. Sarnecky, *A History of the U.S. Army Nurse Corps* (Philadelphia: University of Pennsylvania Press, 1999), 23; and Humphreys, *Marrow of Tragedy*, 75.
70 Devine, *Learning from the Wounded*, 249-252.
71 Quoted in Giesberg, *Civil War Sisterhood*, 21.
72 Brockett and Vaughan, *Woman's Work in the Civil War*, 527; 527-539.
73 Maxwell, *Lincoln's Fifth Wheel*, 1-23.