



# **THE FUGELMAN**

## **THE NEWSLETTER OF THE SECOND WISCONSIN VOLUNTEER INFANTRY ASSOCIATION**

THE BLACK HAT BRIGADE---THE IRON BRIGADE

1861-1865

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**VOLUME XXIV**

**ISSUE 8 AUGUST, 2015**

**FU-GEL-MAN: A well-drilled soldier placed in front of a military company as a model or guide for others.**

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## **TABLE OF CONTENTS**

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PASS IN REVIEW	Page 2
SECOND WISCONSIN CAMPAIGN SCHEDULE	Page 3
EDITORIAL	Pages 3-11
REGIMENTAL DISPATCHES	Pages 11-15

ATTENTION TO ORDERS	Pages 15
FROM THE CAMPS OF THE SECOND WISCONSIN	Pages 15-20
INFANTRY	Page 15
ARTILLERY	Pages 15-18
THE SKIRMISHERS	Page 20
CIVIL WAR MILESTONES	Pages 20-21
DID THE AMERICAN CIVIL WAR EVER END	Pages 21-27
SIX WAYS THE CIVIL WAR CHANGED AMERICAN MEDICINE	Pages 27-37

## **PASS IN REVIEW**

*From the quill of Lt. Colonel Pete Seielstad*



Lt. Col. Seielstad is taking a well deserved leave, but will return soon with more insights into command, the role of the 2<sup>nd</sup> Wisconsin, our scheduled events, and how we present ourselves as reenactors.

# **CAMPAIGN SCHEDULES OF THE COMPANIES AND ASSOCIATION**

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## **August**

<b>1st-2nd</b>	<b>1 USSS, 15th WI, 8th WI &amp; 2nd WI (Skirmish team)</b>	<b>Boscobel, WI.</b>
<b>1st &amp; 2nd</b>	<b>Muskets &amp; Memories Reenactment (Co.B.K.E., 6th LA, Bty B. )</b>	<b>Boscobel, WI.</b>

## **EDITORIAL**

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### **THE CONFEDERATE FLAG—WHAT DOES IT MEAN AND HOW SHOULD WE DEAL WITH IT?**

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**It is with some trepidation that this editor has set upon a course of action that can have but few positive results. But one thing about being an editor is that from time to time one can indulge his own views. He has not done this in the past, other than in historical analysis of events as they occurred in history. But in recent days and weeks much has been written and said about the confederate battle flag. So here the editor will contribute his two cents on the issue.**

**The first thing that comes to mind is the fabrication of the meaning of the flag. All of you have been confronted at civil war events by a “reb” or “cracker” who will tell you and everyone within listening distance that the war was not over slavery! And everyone with a brain and a modicum of study of the war and its causes know that this is just not true!! Then along these same lines they will begin to describe the “thousands” of blacks who fought for the rebel cause. The message is that blacks fought under the same rebel flag and thus it can’t represent the defense of slavery or that blacks preferred a life in slavery. You know the argument—the slaves had it better than the wage slaves/workers in the North!**

**I have no objection to the display of the rebel battle flag on private property or during historical recreations. I can also understand a claim that the flag represents heritage and thus should be honored. Herein lays my problem with the battle flag . . . that heritage needs to be set out honestly and accurately for all to understand. It may indeed symbolize the courage of a group of fighting men, but there is much more to that flag!**

**On the issue of what precipitated secession and the coming war one needs only look at what those men said about secession and the reasons THEY gave for leaving the Union and taking up the weapons of war. The first piece of evidence on this issue comes from what was known as the “Cornerstone” speech by Alexander Stephens, the newly elected vice-president of the rebel states. There was certainly no confusion on Mr. Stephens’ part as to the nature of the conflict between the North and the South.**

***This new constitution. or form of government, constitutes the subject to which your attention will be partly invited. In reference to it, I make this first general remark: it amply secures all our ancient rights, franchises, and liberties. All the great principles of Magna Charta are retained in it. No citizen is deprived of life, liberty, or property, but by the judgment of his peers under the laws of the land. (As a penalty for criminal conduct for which the person was found guilty) The great principle of religious liberty, which was the honor and pride of the old constitution, is still maintained and secured. All the essentials of the old constitution, which have endeared it to the hearts of the American people, have been preserved and perpetuated. Some changes have been made. Some of these I should have preferred not to have seen made; but other important changes do meet my cordial approbation. They form great improvements upon the old constitution. So, taking the whole new constitution, I have no hesitancy in giving it as my judgment that it is decidedly better than the old.***

**The newly forming Confederate States of America adopted the U. S. Constitution almost verbatim except for the preamble and provisions covering the length of term of the executive and having Department heads appear in the rebel Congress. They also added a number of provisions to assure perpetuation and protections to the institution of slavery. They also added a provision that prohibited secession from the CSA. Stephens goes on**

to discuss changes to the old constitution before addressing the major concern over the institution of slavery:

***But not to be tedious in enumerating the numerous changes for the better, allow me to allude to one other though last, not least. The new constitution has put at rest, forever, all the agitating questions relating to our peculiar institution African slavery as it exists amongst us the proper status of the negro in our form of civilization. This was the immediate cause of the late rupture and present revolution. Jefferson in his forecast, had anticipated this, as the “rock upon which the old Union would split.” He was right. What was conjecture with him, is now a realized fact.***

***Our new government is founded upon exactly the opposite idea; its foundations are laid, its corner- stone rests, upon the great truth that the negro is not equal to the white man; that slavery subordination to the superior race is his natural and normal condition. This, our new government, is the first, in the history of the world, based upon this great physical, philosophical, and moral truth.***

***I recollect once of having heard a gentleman from one of the northern States, of great power and ability, announce in the House of Representatives, with imposing effect, that we of the South would be compelled, ultimately, to yield upon this subject of slavery, that it was as impossible to war successfully against a principle in politics, as it was in physics or mechanics. That the principle would ultimately prevail. That we, in maintaining slavery as it exists with us, were warring against a principle, a principle founded in nature, the principle of the equality of men. The reply I made to him was, that upon his own grounds, we should, ultimately, succeed, and that he and his associates, in this crusade against our institutions, would ultimately fail. The truth announced, that it was as impossible to war successfully against a principle in politics as it was in physics and mechanics, I admitted; but told him that it was he, and those acting with him, who were warring against a principle. They were attempting to make things equal which the Creator had made unequal. (<http://teachingamericanhistory.org/library/document/cornerstone-speech/>)***

**Let us now go on to the views adopted by the various states when they set out the reasons for secession. The first claims that follow were statements that said one cause for secession was the election of Lincoln as President. You will note the objection to Lincoln was based on the fear of what he might do to restrict or abolish slavery:**

#### **Georgia**

***This is the party to whom the people of the North have committed the Government. They raised their standard in 1856 and were barely defeated. They entered the Presidential contest again in 1860 and succeeded. The prohibition of slavery in the Territories, hostility to it everywhere, the equality of the black and white races, disregard of all constitutional guarantees in its favor, were boldly proclaimed by its leaders and applauded by its followers.***

#### **South Carolina**

***On the 4th day of March next, this party will take possession of the Government. It has announced that the South shall be excluded from the common territory, that the judicial tribunals shall be made sectional, and that a war must be waged against slavery until it shall cease throughout the United States.***

#### **Texas**

***And, finally, by the combined sectional vote of the seventeen non-slave-holding States, they have elected as president and vice-president of the whole confederacy two men whose chief claims to such high positions are their approval of these long continued wrongs, and their pledges to continue them to the final consummation of these schemes for the ruin of the slave-holding States.***

#### **Mississippi**

***It has recently obtained control of the Government, by the prosecution of its unhallowed schemes, and destroyed the last expectation of living together in friendship and brotherhood. Utter subjugation awaits us in the Union, if we should consent longer to remain in it.***

***It is now time to see what these southern leaders were saying about slavery and the relationship between that institution and secession:***

#### **Mississippi**

***Our position is thoroughly identified with the institution of slavery-- the greatest material interest of the world. Its labor supplies the product which constitutes by far the largest and most important portions of commerce of the earth... These products have become necessities of the world, and a blow at slavery is a blow at commerce and civilization. That blow has been long aimed at the institution, and was at the point of reaching its consummation. There was no choice left us but submission to the mandates of abolition, or a dissolution of the Union, whose principles had been subverted to work out our ruin.***

#### **Texas**

***The servitude of the African race, as existing in these States, is mutually beneficial to both bond and free, and is abundantly authorized and justified by the experience of mankind, and the revealed will of the Almighty Creator, as recognized by all Christian nations.***

#### **South Carolina**

***Those [Union] States have assumed the right of deciding upon the propriety of our domestic institutions; and have denied the rights of property established in fifteen of the States and recognized by the Constitution; they have denounced as sinful the institution of slavery; they have permitted open establishment among them of societies, whose avowed object is to disturb the peace and to eloign the property of the citizens of other States.***

#### **Georgia**

***That reason was [the North's] fixed purpose to limit, restrain, and finally abolish slavery in the States where it exists. The South with great unanimity declared her purpose to resist the principle of prohibition to the last extremity.***

***([http://www.civilwar.org/education/history/secession/?referrer=http://r.search.yahoo.com/\\_ylt=AwrBT9XMdLFVrTcAz1hXNyoA;\\_ylu=X3oDMTEzYiM1a3ViBGnrbG8DYmYxBHBccwMxBHZ0aWQDVklQNjE2XzEEc2VjA3Ny/RV=2/RE=1437721933/R0=10/RU=http%3a%2f%2fwww.civilwar.org%2feducation%2fhistorg%2fsecession%2f/RK=0/RS=wfaa5qj8J03DdrH8V7JxIsmHRS-](http://www.civilwar.org/education/history/secession/?referrer=http://r.search.yahoo.com/_ylt=AwrBT9XMdLFVrTcAz1hXNyoA;_ylu=X3oDMTEzYiM1a3ViBGnrbG8DYmYxBHBccwMxBHZ0aWQDVklQNjE2XzEEc2VjA3Ny/RV=2/RE=1437721933/R0=10/RU=http%3a%2f%2fwww.civilwar.org%2feducation%2fhistorg%2fsecession%2f/RK=0/RS=wfaa5qj8J03DdrH8V7JxIsmHRS-))***

**Let us now consider the argument that thousands of blacks served in the rebel armies. First, it was illegal in both the rebel and Union armies for blacks to serve in uniform in the armies. That would change in the Union armies after the final Emancipation Proclamation on January 1<sup>st</sup>, 1863. It**

**did not change in the confederacy until early 1865. Despite this change in principle, it came too late for the creation of black units in the rebel armies. Another thing to consider was the south was deadly fearful of armed blacks. Their memory of slave rebellions and the slaughter of white folks were crystal clear in their minds.**

**I remember on one occasion I was discussing this issue and I asked the person to produce any war records (muster sheets, pay records, pension records or the like) to demonstrate that all these blacks fought for the rebel armies. With a straight face he looked me in the eye and said the rebels burned all the blacks records to save them from Yankee reprisals!!**

**Finally, blacks clearly demonstrated their preference by enlisting in large numbers in the Union army. Most of them were runaway slaves who fought to free their people from slavery.**

**This is the historical record. Does that mean anything to those who wave that rebel rag. The truth just isn't in them! That is my problem with their flag and its meaning. But as a historical item I have no objection to the display of the flag. My objection is the lack of honesty surrounding that flag.**

**A flag is a symbol to those who share allegiance to that particular geographic or political jurisdiction. Just as the "stars and stripes" symbolized the cause for which the men in the Union ranks fought and died, so it is true of the "stars and bars". The Union flag symbolized Union and freedom. The rebel flag represented rebellion against their own country and it represented a war to create a slave republic. While not every soldier in the rebel armies fought to preserve slavery, everyone one of them understood what the war was about and the cause for which they fought. They were perfectly content to fight to achieve this result.**

**The supporters of the rebel flag argue that the flag is not a symbol of hate, but of heritage. They say the flag represents the bravery of the southern troops who fought under that flag. The corollary to this argument is that Union troops were not as brave, did not fight as well as southern troops. You all know the argument—the poor outnumbered and outgunned rebel troops were defeated by numbers and materiel. This is a canard!!**

**Let us look at the numbers engaged at some of these battles. The first one to consider is Shiloh. Union forces on the first day of battle numbered 49,000. By day two General Buell was coming on the field with an**



**additional 18,000, but not all of those troops would be engaged. Primarily General Nelson's division was the only one involved on day two of the battle. The number of rebel troops engaged amount to 45,000 men. Thus the numbers of troops on both sides were roughly equivalent in number.**

**At the Battle of Chickamauga rebel troops under General Bragg numbered 66,000 men. The troops under the command of General Rosenerans amounted to 58,000. In this case the rebel army outnumbered the Union forces on the field.**

**Another battle for consideration was the Battle of Stones River. At Murfreesboro the rebel army numbered 34,739. Union forces amounted to 41,400 men under arms. The rebel armies at Chancellorsville, Antietam and Gettysburg were outnumbered by thousands; but the discrepancy was negated by poor Union generalship or the geographic location of the battle. While the Army of the Potomac suffered defeat at the hands of the rebel forces, their vigor and courage never flagged and they always gave a good account of themselves in battle after battle.**

**One final point undermining the canard that southern troops were superior in courage and fighting ability over their Yankee counterparts comes from Shelby Foote. In the documentary by Ken Burns on the civil war Foote argued that the bravest soldiers in the war were those Union troops who assaulted Marye's Heights during the battle of Fredericksburg. Attacking uphill in the face of massed artillery and men firing from the shelter of a stone wall, these men made repeated attacks over a field littered with the dying and wounded. They knew the futility of the effort but onward they swept trying to drive the rebel forces from the field. This is a view shared by this editor! And it must be noted that military experts wrote in their military texts that the principle of Napoleonic tactics required two or three times the numbers of the defenders by the attacking force to overcome the advantages of fighting on the defensive. It was a very rare occurrence when Union forces could boast that kind of advantage.**

**The rebel flag means the same thing today it meant to the southern soldiers who fought under it folds between 1861 and 1865. That flag was intended to inspire men to defend racial bigotry and maintain the institution of human bondage. It HAS NOT BEEN HIJACKED, it stills means the same thing and a majority of white southerners support that message to this day! There can be no doubt that the rebel battle flag**

**represented the superiority of the white race and an antipathy to racial equality following the War of the Rebellion.**

**This brings me to the issue of the rebel flag flying on public grounds. The prevalence of that flag became important in the 1950's and beyond as this nation struggled with the assertion of equality by blacks in this country. The flag was then and now a way of asserting the old discredited principles of nullification and secession. The meaning of the flag wasn't hijacked, it reflected the majority view of white Southerners. It wasn't hijacked by the Klu Klux Klan either. The Klan used this flag as their symbol and no one objected to them doing so! The Klan existed and carried out its program of terrorism against blacks, Catholics and Jews with the acquiescence of the white Southern population. We still hear arguments and threats of secession coming from the mouths of Southern politicians. They say these things because their voters approve of these views! Flying the rebel battle flag on government property reflects the same views held by those in 1861 through 1865. Black citizens pay taxes to the government that flies a flag dedicated to depriving them of their political rights! For that reason these flags don't belong on public property. These folks lost that argument with the fall of their rebellion and the loss of the war! One final point here . . . even Germans know what the flag stood for. In Germany it is illegal to carry a Nazi flag for any purpose. You can be arrested for doing so. So when neo-Nazi's demonstrate in Germany they carry the rebel battle flag. They understand its meaning better than our Southern sympathizing compatriots do apparently! It is their symbol, AS WEEL AS OURS, for a racist point of view.**

**Finally there have been complaints raised by the suggestion that rebel flags be removed from national cemeteries. They should be. These cemeteries were initially created to bury the Union men who died in the War of the Rebellion. They died at the hands of men fighting under the rebel battle flag. These flags do not belong in these cemeteries. There are cemeteries that were created for the Southern dead. Put the flags there if you must, but not in our National cemeteries! Social media has seen a spate of postings regarding acts of Congress during the 20<sup>th</sup> century attributing the status of American soldiers to those who chose to fight under that rebel flag. I note two things here: first, it was done while few, if any, veterans of the war still lived, and secondly, it took an act of Congress to make those soldiers Americans! That is a recognition of a fact I have longed maintained—they themselves maintained the idea that they were no longer citizens of this country when the war ravaged the nation. Lincoln held**

**steadfast to the principle that secession was not possible, or constitutional, and these wayward brothers were Americans. I don't suggest Lincoln, as a matter of policy, was wrong, but in the minds of those who fought under the rebel battle flag, they were not citizens of the United States and from their point of view they were not American soldiers no matter what Congress said decades after the war had ended.**

**The rebel battle flag is a historical instrument and for that reason should be allowed. And no one is saying a person can't fly that flag in their own property. What I am saying is let's be honest about that flag and its historical content when used at reenactments and other occasions. The history is clear and after all if we don't learn the lessons of the past we are doomed to repeat it (Rick Perry and Ted Cruz among others). But it is past time to take that flag from governmental property and national cemeteries. It doesn't belong there now and didn't in the past!**

## **REGIMENTAL DISPATCHES**

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**“MUSKETS AND MEMORIES” EVENT THIS  
COMING WEEKEND!**

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**By the time this newsletter arrives we will be but a couple of days away from one of the best civil war reenactments on our annual schedule. The details for this event appeared in last month's *Fugelman*. This is a reminder to those who plan to attend the event and a call to those who may be sitting on the fence about going to the event.**

**This event is always a lot of fun for reenactors. The scenarios for the battles are always interesting and challenging for the officers and men in the ranks. There is always a very good turnout of spectators and visitors in the camps. It provides a great opportunity to teach the history of the times and the men who served in the armies. And above all the people of Boscobel always go out of their way to make our people feel welcomed during our stay there!**

**If you have been to this event in the past it is not necessary to tell you what a great event this is. If you have not attended this event in the past you really need to make a special effort to attend. You won't regret that decision!**

**The weather for the weekend will, as always at this event, be a little warm. Saturday will be sunny and 86 degrees. Sunday it will get to 87 degrees with thunderstorms possible in the afternoon. All on all it looks like a good weekend weatherwise!**

**Everyone please have a safe and enjoyable event!**

## **AFTER ACTION REPORT ON "RETURN TO CAMP RANDALL" EVENT**

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Figure 1 Photo by Lyle Laufenberg

### **The head muckie-mucks gather**



Figure 2 Photo by Lyle Laufenberg

### **Posting the colors**



**A brave lad willing to shed blood for the Union!**



Figure 3 Photo by Jim Dumke

**Pay and muustering out paperwork**





Figure 4 Photo by Tiffany Kvalheim

## **ATTENTION TO ORDERS**

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**There are no orders from headquarters to report to the men.**

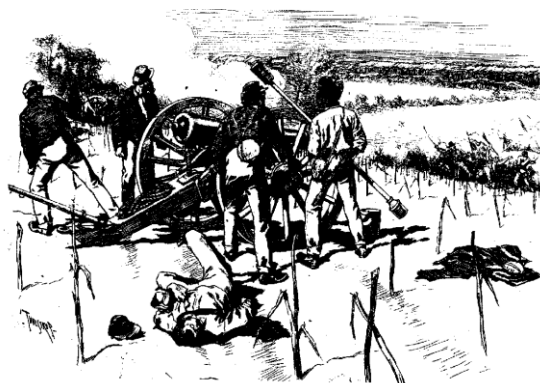
**FROM THE CAMPS OF THE  
COMPANIES OF THE SECOND  
WISCONSIN**

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**INFANTRY**



## **ARTILLERY**



### **MENOMINEE FALLS VILLAGE EVENT ATTENDED BY OUR BATTERY MATES**

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**The following photos come to the newsletter from our colleague, Lyle Laufenberg. They were taken at the Menominee Falls event and show the boys from the battery at work. Thank you Lyle for sending them along to us!**







## **SECOND WISCONSIN REGIMENTAL FIELD HOSPITAL**



**The newly formed 2<sup>nd</sup> Wisconsin Regimental Field Hospital had its first official appearance at an event at the “Return To Camp Randall” event. Below are photos by Tiffany Kvalheim from the event. Stan Graiewski, Jerry Hahn and Jim Dumke were surgeons on duty for the event. The field hospital had a fair number of visitors during the day and numerous discussions with folks about the role of the field hospital and civil war medicine.**









## **THE SKIRMISH TEAM**



## **CIVIL WAR MILESTONES**

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### **AUGUST**

**Aug. 5, 1864**

**Battle of Mobile Bay**

**Aug. 9, 1862**

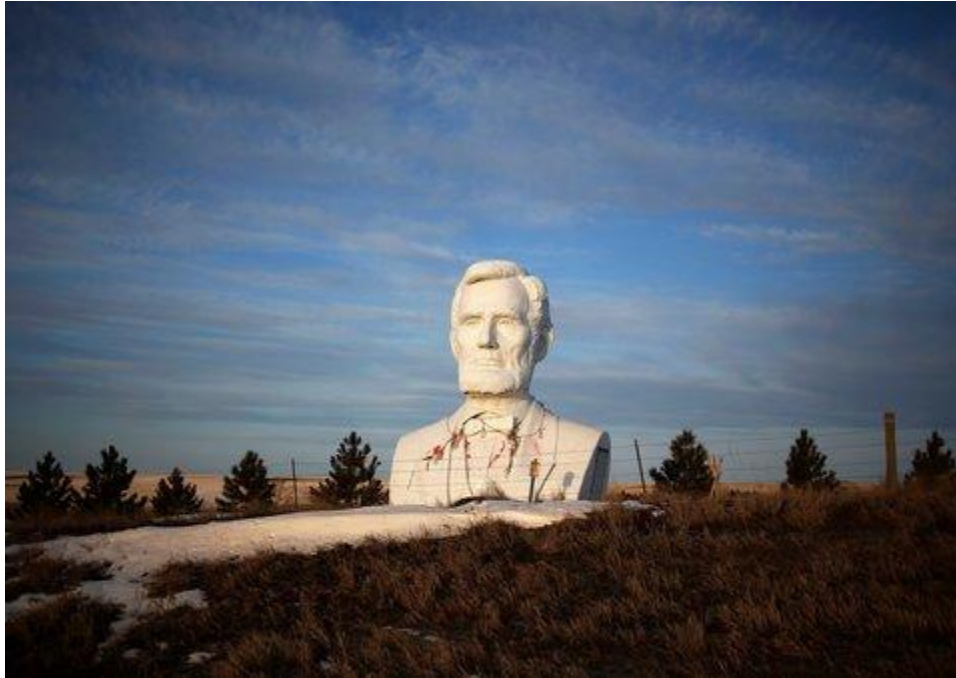
**Battle of Cedar Mountain**

<b>Aug. 10, 1861</b>	<b>Battle of Wilson's Creek</b>
<b>Aug. 17, 1862</b>	<b>Uprising of Sioux Indians in Minnesota</b>
<b>Aug. 21, 1821</b>	<b>Gen. William Barksdale, CSA, born</b>
<b>Aug. 28, 1861</b>	<b>Fort Hatteras falls</b>
<b>Aug. 28, 1862</b>	<b>BATTLE OF BRAWNERS FARM. . . the men forming the Black Hat Brigade and Battery B engage in their first engagement as a unit. Col. Edgar O'Connor mortally wounded.</b>
<b>Aug. 29, 1833</b>	<b>Col. Edgar O'Connor, USA, born</b>
<b>Aug. 29, 1862</b>	<b>The Battle of Second Bull Run begins</b>
<b>Aug. 30, 1862</b>	<b>Maj. Gen. John Pope is defeated as the Battle of Second Bull Run concludes</b>

## **DID THE AMERICAN CIVIL WAR EVER END?**

*BY [TED WIDMER](#)*

**JUNE 4, 2015 12:41 PM JUNE 4, 2015 12:41 PM**



**A giant bust of Lincoln by the artist David Adickes in a field outside of Williston, North Dakota. Credit Shannon Stapleton/Reuters**

**When did the Civil War end? Many have answered never. As late as 1949, in an address at Harvard, the writer Ralph Ellison said that the war “is still in the balance, and only our enchantment by the spell of the possible, our endless optimism, has led us to assume that it ever really ended.”**

**Still, there was an ending of sorts, in 1865. Sometimes, it came cleanly, as with Gen. Robert E. Lee’s surrender at Appomattox on April 9. At other times, the war just seemed to give out, as soldiers melted away from their regiments and began to find their way home. Other generals in more distant theaters fought on gamely: Not until June 23 did Stand Watie, a Cherokee chief and a Confederate brigadier general, sign a cease-fire agreement at Doaksville, in what is now Oklahoma.**

**Then there was Abraham Lincoln’s assassination. This sickening act of violence, when added to all the others, brought a definitive feeling that an era had ended, as surely as Lincoln’s election in November 1860 had precipitated it. The funeral train that carried Lincoln’s remains home to Springfield, Ill., drew millions, and while the tragedy felt senseless, it also offered the nation a chance to mourn something much larger than the death of a single individual. To the end, Lincoln served a higher cause.**

**After he was laid to rest, on May 4, the armies united for an epic display of glory, worthy of Rome. Over two days, on May 23 and 24, more than 150,000 soldiers marched down Pennsylvania Avenue in Washington before a reviewing stand where President Andrew Johnson and Lt. Gen. Ulysses S. Grant stood.**

**That was a political as well as a military statement, for this vast army did not exactly disappear. The Grand Army of the Republic, founded in 1866, would become a potent lobbying force for veterans. Its immense gatherings helped to choose Lincoln's successors for decades.**

**More than a year later, on Aug. 20, 1866, President Johnson proclaimed that final pockets of resistance in Texas were "at an end." We could call this, too, the close of the war.**

**But much remained "in the balance," as Ellison said; uncomfortable, unfinished. Certainly, the presence of so many veterans was a new fact for Americans, and kept the war alive, simmering, for decades.**

**More than a few required help to cope with their trauma, and the federal government, which had grown so much during the war, grew again to address their needs. It paid out pensions, it built hospitals, it maintained service records, and it assumed more responsibility for the mental and physical health of those who had given so much. That was an important precedent for the New Deal and the Great Society.**

**To this day, as a recent Wall Street Journal article reported, an elderly North Carolina woman, Irene Triplett, collects \$73.13 a month for her father's pension. He served in both the Confederate and Union armies: His tombstone avoids that complexity by saying simply, "He was a Civil War soldier."**

**Reintegrating these former soldiers took decades. What we now regard as the best Civil War fiction, such as the work of Stephen Crane and Ambrose Bierce, did not even appear until the 1890s, as if the war's memory was too potent at first.**

**A new product, Coca-Cola, was introduced in 1885 by a former Confederate officer, John Pemberton, who had been slashed by a saber in the final fighting of the war, after Appomattox, then wrestled with an addiction to morphine, to dull the pain. A pharmacist, Pemberton experimented with a mysterious formula that derived from the coca leaf and the kola nut, to ease his suffering. The early marketing for the elixir suggested that it could reduce the symptoms that veterans suffered from, including neurasthenia, headaches and impotence.**

**Many veterans retained their sidearms, including Confederate officers, and weapons were easily available, thanks to an arms industry that had done great service to the Union cause. They could hardly be expected to voluntarily go out of business. With new products (like Winchester's Model 1866 rifle), sophisticated distribution networks and a public eager to buy, the industry entered a highly profitable phase. Winchester's repeating rifles needed hardly any time for reloading, and sold briskly in Europe, where American arms tipped the balance in local conflicts.**

**The Winchester was easily transported to the West, where new military campaigns were undertaken against Native Americans, and few could be blamed for wondering if the Civil War had in fact ended. Many of the same actors were present, and it could be argued that this was simply another phase of the crisis of Union, reconciling East and West, rather than North and South.**

**This tragic epilogue does not fit cleanly into the familiar narrative of the Civil War as a war of liberation. Peoples who had lived on ancestral lands for thousands of years were no match for a grimly experienced army, eager to occupy new lands, in part to reward the soldiers who had done the fighting.**

**Natives called the repeating rifles "spirit guns," and had no answer for them. They fought courageously, but in the end had no choice but to accept relocation, often to reservations hundreds of miles away. Adolf Hitler would cite these removals as a precedent for the Nazi concentration camps.**



**In other ways, the war endured. The shift westward created a huge market for building products, furnishings and all of the technologies that had advanced so quickly during the fighting. One skill that amazed observers was the speed with which Americans could build railroads and the bridges that they needed to cross. Between 1865 and 1873, more than 35,000 miles of tracks were laid, greater than the entire domestic rail network in 1860.**

**This activity was very good for business. Huge profits were made as those who had become wealthy supplying the war effort adapted to the needs of a civilian population eager to start anew. Indeed, it is difficult to tell from the 1870 census that any war had taken place at all. The 1860 census had valued the total wealth of the United States at \$16 billion; 10 years later, it was nearly twice that, \$30 billion. So many immigrants came between 1860 and 1870 that the population grew 22.6 percent, to 38.5 million, despite the massive losses of war dead.**

**To careful observers in 1865, it was palpable that something important had already happened during the war. To organize victory, a grand consolidation had taken place, in which leading concerns had improved their organizations, crushed their smaller rivals and strengthened distribution networks. The railroad was a key part of this consolidation; so was the telegraph, often built along the tracks. Military goods needed to move quickly around the country to supply armies, and all of those skills were instantly transferable to private enterprise. One firm, an express freight delivery service founded in Buffalo, moved its goods slightly faster than the competition. It was, and is, known as American Express.**

**Information was vital to make all of these systems work. During the war, the Military Telegraph Corps built 8 to 12 miles of telegraph line a day; and the military alone sent 6.5 million messages during the war. By the end of 1866, more than 80,000 miles of line existed, and these were rapidly extended into the West and South, reknitting some of the strands of Union.**

**Entirely new sectors of the economy had sprung up as well. In 1859, on the eve of the conflict, oil was discovered in northwestern Pennsylvania, and throughout the war, its value became clear to a war economy that urgently needed to lubricate the machinery of production. John D. Rockefeller**

**bought a refinery in Cleveland in 1863, a major step on the way to the creation of Standard Oil. As soon as the war ended, the search for oil in new locations began: The first well in Texas was dug in 1866, in Nacogdoches County.**

**Many veterans, having paid so dearly for freedom, were troubled to come back from the war, only to find a new economy, dominated by industrial barons, quite a few of whom had paid substitutes to do their army service. Lincoln's words about freedom continued to move people, but his emphasis on equality seemed to fade as the power of money rose to new heights. It was not only that a small elite had become extremely wealthy; but money itself seemed to move in new ways, fast and loose.**

**In other words, it was unclear to many Americans what, exactly, they had won. A great evil had been defeated; and Union forcibly defined and defended. But so rapid were the changes unleashed by the war that soldiers from both armies blinked their eyes in amazement when they returned home. Like Ulysses, the Greek hero their commander was named after, they often did not recognize the country they came back to.**

**Perhaps the most complicated legacy of the war was its claim to have liberated millions of African-Americans from slavery. This was not the official purpose of the war when it began in 1861, but it became so, especially after the scale of the war required a cause worthy of so great a sacrifice.**

**But when did slavery actually end? Was it the national ratification of the 13th amendment, on Dec. 6, 1865? Or the day Mississippi ratified it, in 1995? Or the gift of full citizenship (including voting rights) to African-Americans? There are those who would argue that we are still waiting for that Day of Jubilee. To read the stories that came out of Ferguson, Mo., Cleveland and Baltimore in the last year — all communities that remained in the Union — is to realize how distant the victory of the Civil War feels to large numbers of African-Americans.**

**Of course, that does not minimize the importance of the Confederacy's defeat. It ended forever a way of life and politics that had dominated the United States from its founding. It accelerated the demise of slavery where it still existed, in Cuba and Brazil, and encouraged liberals around the world**

**to push for greater rights. In the fall of 1865, Victor Hugo wrote in a notebook, “America has become the guide among the nations.”**

**In France, Napoleon III was destabilized by Lincoln’s victory, and pulled back from his adventure in Mexico, where his puppet, Maximilian, was shot by a firing squad in 1867. Three years later, he was removed after his defeat in the Franco-Prussian War, and the transfer of the provinces of Alsace and Lorraine to Germany left a bitterness that would fuel the world wars of the 20th century.**

**Without the Civil War, and its tempering of the national character, would the United States have been able to mount a great global campaign against fascism? Surely it would have been feebler, without the manufacture of war matériel across all the regions, or the rhetoric of freedom Franklin D. Roosevelt used to inspire the world.**

**Nearly all of the national triumphs of the last century, from the civil rights movement to the exploration of space to the birth of the digital age, stemmed from the contributions of Southerners, Northerners and Westerners working together. We have had failures too — we see them on a daily basis. But the refusal to fall apart in 1861 made a difference.**

***Ted Widmer is an assistant to the president for special projects at Brown University, and the editor of “The New York Times Disunion: Modern Historians Revisit and Reconsider the Civil War from Lincoln’s Election to the Emancipation Proclamation.”***

## **SIX WAYS THE CIVIL WAR CHANGED AMERICAN MEDICINE**

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REFRAME THE WAY THEY THOUGHT ABOUT MEDICINE**



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*By Helen Thompson*

image: [http://thumbs.media.smithsonianmag.com/filer/57/fc/57fca589-acfb-48c0-8ab0-aa3795396429/civil-war-038\\_edit.jpg\\_\\_800x600\\_q85\\_crop.jpg](http://thumbs.media.smithsonianmag.com/filer/57/fc/57fca589-acfb-48c0-8ab0-aa3795396429/civil-war-038_edit.jpg__800x600_q85_crop.jpg)



A ward in Carver Hospital in Washington, D.C., during the Civil War. One key innovation during this period was the division of hospitals into wards based on disease. (U.S. National Archives)

**In 1862, U.S. Surgeon General William Hammond put out a call to medical field officers in the Union Army: Send any specimens of morbid anatomy that might be valuable to military medicine and surgery. It might seem like a strange request, but the medical profession was in the midst of change—from a system based on tradition to one based on evidence.**

**“When there’s a war, there are evolutionary changes, not necessarily revolutionary changes,” says Jeff Reznick, a historian at the National Library of Medicine in Bethesda, Maryland. Medicine in the United States did some significant evolving during the Civil War. Prior to the war, humoral theory—where an imbalance between the body’s “humours” caused illness—still formed the basis of medical practice. The idea of a germ wasn’t even on physicians’ radar. More than 12,000 physicians served during the Civil War on both sides. Together, they treated patients in the millions, and sometimes they had to get creative and veer off from the teachings of classical physicians.**

**“The real lasting impact was the change in mindset of both doctors and the people who they were treating,” says NLM historian Ken Koyle. Writing this week in the *New England Journal of Medicine*, Koyle and Reznick argue that the war instigated these lasting changes in mentality that forever altered the American medical profession:**



**When Hammond became surgeon general of the Union Army in 1862, he shook things up. At the beginning of the war, the requirements for becoming an army physician or surgeon were minimal at best. Hammond instituted mandatory training in public health, hygiene and surgery for all Union Army**

**medical officers. His call for specimens also provided a textbook of case studies to train doctors after the war. (Today, the collection of body parts, fluids, case notes and imaging slides is housed at the National Museum of Health and Medicine in Maryland.)**

**The term “combat medic” didn’t exist during the Civil War or for decades afterward. Instead, enlisted men were pulled from the ranks to serve as “hospital stewards”. Although these men received some first-aid training, there was really one main requirement: “They had to be able to read doctors’ notes,” says Reznick. As casualties mounted, attendants and nurses took on more responsibilities, especially triaging patients—noting who needed to be treated and who could wait. Some even received a more formal crash course in medicine.**

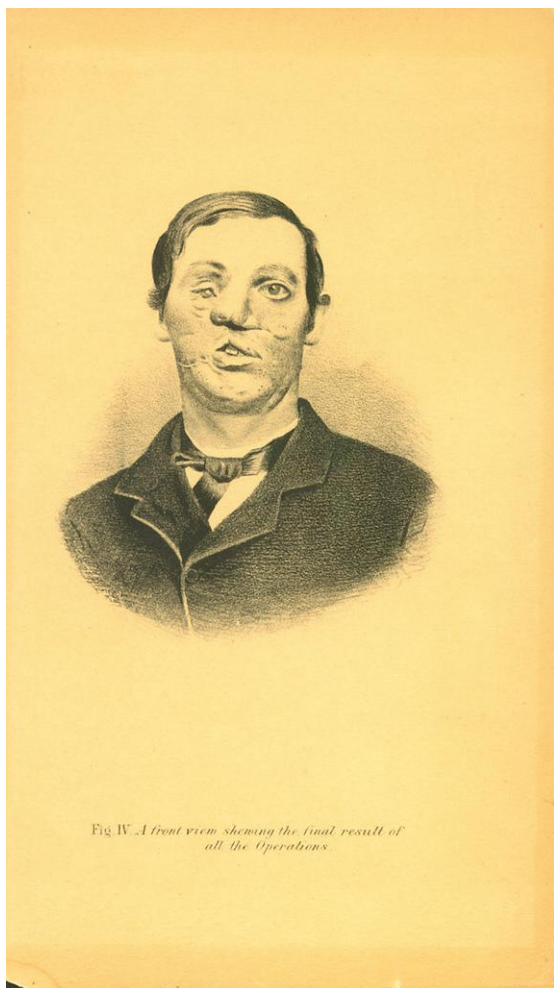


**Perhaps unsurprisingly, one of the most common surgeries conducted during the war was amputation. “The hallmark of a good surgeon was one who could remove a limb in less than three minutes,” says Koyle. “It was effective, but it was brutal.” Working in the field, surgeons learned two key techniques: Leave the wound open and clean it regularly until new skin formed, or close the wound with a flap of skin. The second option was more aesthetically pleasing but came with the potential for painful infection,**



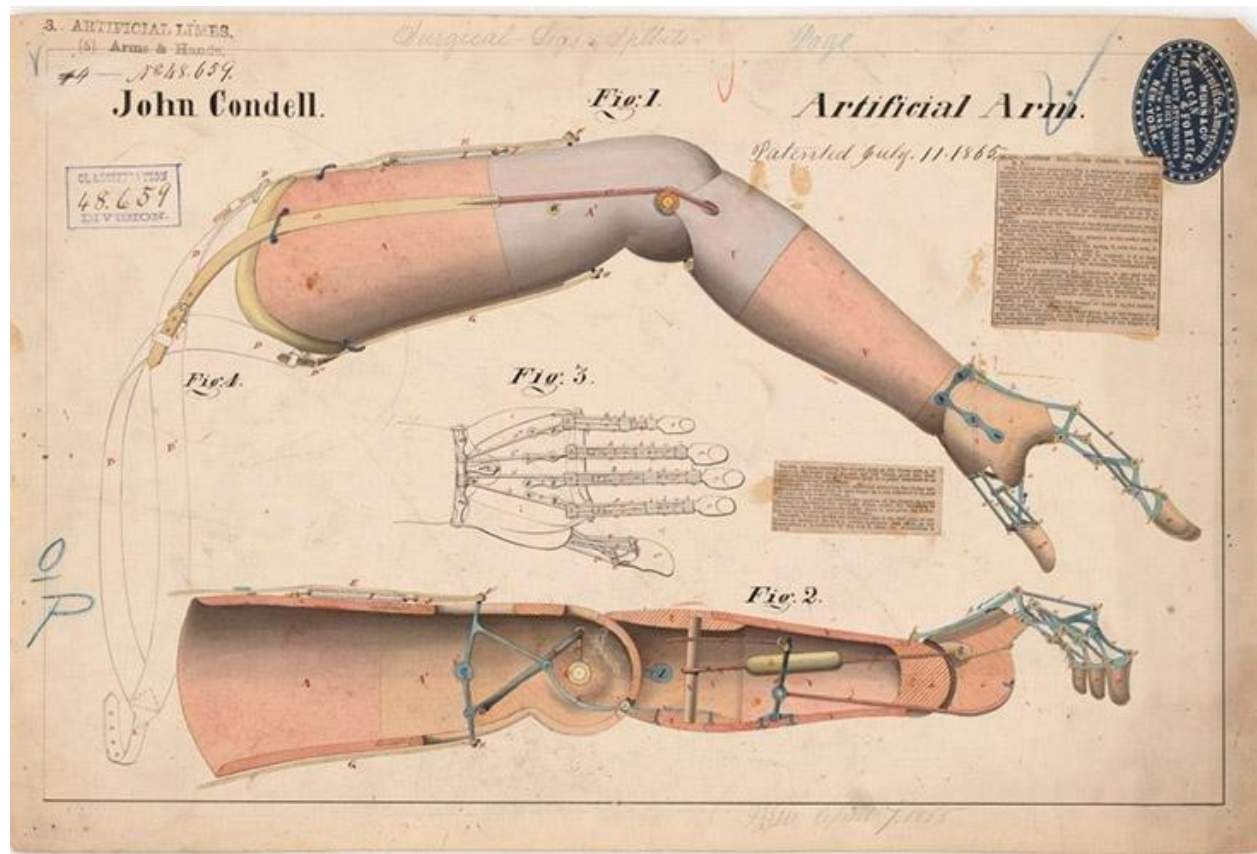
**because it sealed pathogens inside the body—though doctors might not have realized the cause at the time. Later on, when physicians became aware of the concept of germs, this served as the basis for modern closed amputation techniques.**

**The war also saw the emergence of distinct fields of surgery, with the development of plastic surgery in particular. New York surgeon Gurdon Buck famously photo-documented a series of facial reconstructive surgeries on a Union private named Carlton Burgan in 1862. Burgan had taken mercury pills to treat his pneumonia, but the pills had instigated a bout of gangrene that had taken out his right cheekbone. Buck used dental and facial implants to help Buck's face regain its shape.**



**Figure 5 THIS IS BUCK AND THE FINAL RESULTS OF THE PHYSICIAN'S WORK**





**With amputations becoming increasingly common, the Civil War added to a growing population of people in need of prosthetics, and more patients demanded greater variety. “Prosthetics during this time were created out of experience,” says Reznick. While craftsmen constructed most prosthetics, veterans began trying their hand at designing for specific injuries. For example, a Confederate soldier named James Hanger lost his leg at the battle of Philippi, West Virginia, in 1861. After returning home to Virginia, he designed a prosthetic leg with rubber bumpers on the ankle, and he later added a rubber foot. The design presaged modern prosthetic legs with a soft heel and solid ankle.**

**Hanger patented the designed and dubbed it the “Hanger limb”—one example among a flood of patents for new prosthetics. In the 12 years following the war, 133 patents were filed for prosthetics compared to just 34 in the 15 years prior.**



*Ward 4 Lincoln Hospital.  
Showing fanning machine, fans movable, can be worked by one man. It gave more satisfaction than any other tried.*

**At the beginning of the war, field hospitals were set up in whatever buildings were available at a safe distance from battlefields. But as casualties mounted, doctors needed more space to house patients, so armies began building.**

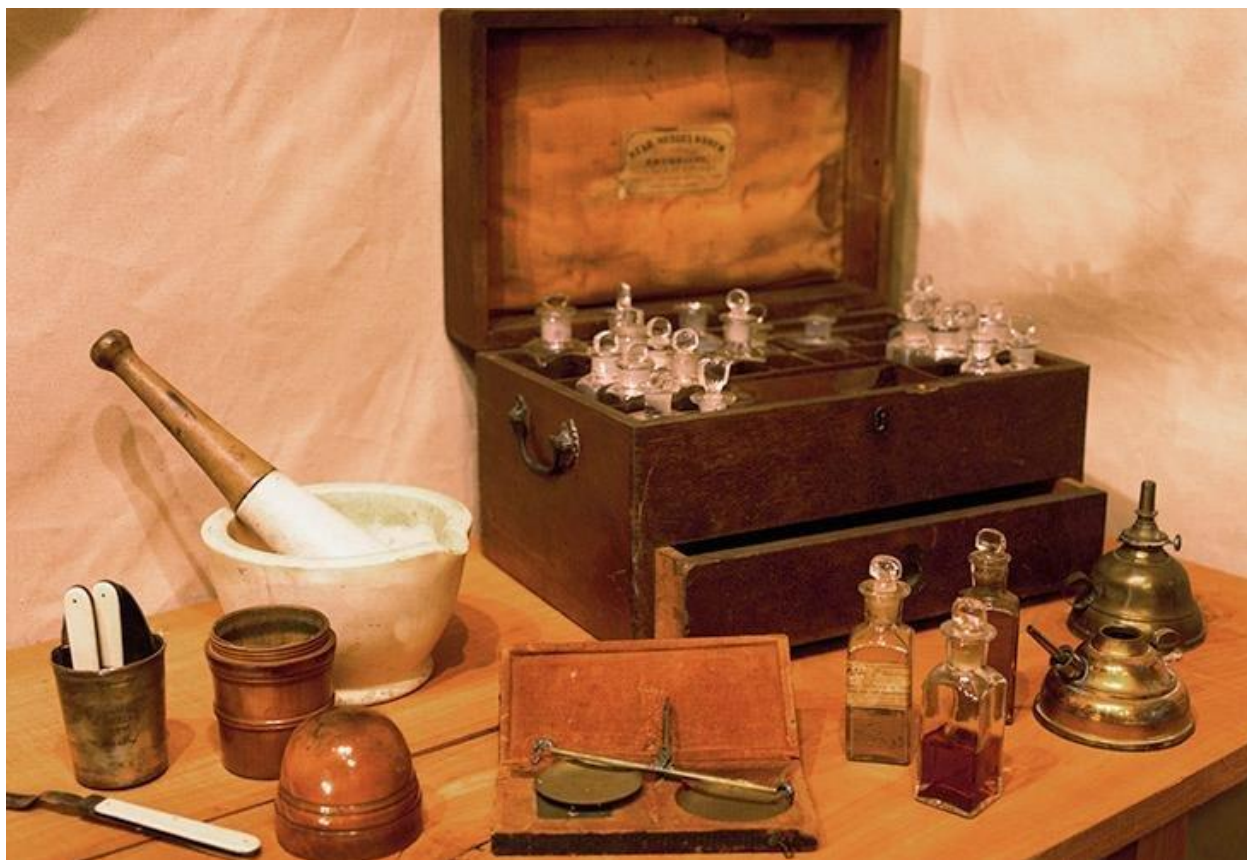
**When Hammond took over as surgeon general, he promoted “pavilion” hospital architecture: a central hub with spokes. Each spoke housed a ward for different diseases and conditions, such as typhoid or malaria, to prevent their spread. Doctors may not have known about germs, but they did associate fresh air with good health. Thus, these hospitals were also constructed with lots of ventilation. “By 1865, over 200 hospitals of this kind had been built, with over 135,000 beds,” says Koyle.**



**At the beginning of the war, the business of getting injured soldiers off the battlefield was arduous and time consuming. It could take days and even up to a week for the wounded to reach a field hospital. Ambulance drivers were completely disorganized and would sometimes flee the battlefield in fear before even picking up any injured men.**

**In August of 1862, a physician named Jonathan Letterman set up the first ambulance system in the Union's Army of the Potomac. With the support of Hammond, he instituted a three-step system for evacuating soldiers from the battlefield and established the Ambulance Corps. Their first stop was a field dressing station, where tourniquets were applied and wounds were dressed. Then they moved to a field hospital, where doctors performed emergency medical procedures. Finally, ambulances would transport patients to a large hospital far from the battlefield for long-term treatment. The U.S. military uses the same basic system today.**





**On one level, the war buffered pharmaceutical knowledge because the influx of patients allowed doctors to figure out the best dosage rates for known medications like quinine, used to treat malaria. The war also highlighted the meds that just weren't working—although not everyone was happy about the change in attitudes.**

**One of Hammond's most controversial moves as surgeon general was to remove mercury- and antimony-based medications, like calomel and tartar emetic, from the formulary, or army pharmacy. These purgative medicines had been prescribed for centuries for everything from headaches to malaria, rooted in the principles of humoral medicine. Patients vomited dramatically, but the medication didn't actually do anything. To make matters worse, these medications came with side effects like mercurial gangrene.**

**By removing them from military pharmacies, Hammond didn't outlaw their use, but he did prevent battlefield doctors from ordering new supplies. With mounting evidence against mercurial meds, some doctors embraced the change, while others dug in their heels. "There was resentment and there was resistance to it," says Koyle. "The need for evidence wasn't really embraced by a lot of doctors." The controversy added fuel to growing**

**opposition against Hammond, and he was replaced as surgeon general in 1864.**

**Read more: <http://www.smithsonianmag.com/science-nature/six-ways-civil-war-changed-american-medicine-180955626/#pGVfvH21Ke4xuG5Q.99>**

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