

Old Baldy Civil War Round Table of Philadelphia

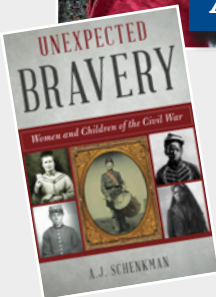
June 9, 2022

The Civil War: April 12, 1861 - August 20, 1866

“Unexpected Bravery: Women and Children of the Civil War”



A.J. Schenkman



The American Civil War divided the United States from 1861-1865. During those years, over two million soldiers served in both the Union and Confederate Armies. What is little known is that not only the numerous children, some as young as 12, enlisted on both sides, but also women who disguised themselves as men in an attempt to make a difference in the epic struggle to determine the future of the United States of America.

A. J. Schenkman is a New York-based writer. Since his start writing for local newspapers, Schenkman has branched out into writing for magazines, blogs, and academic journals, in both history and other subjects. Schenkman is also author of several books about local and regional history. Please be sure to visit him on Facebook, Twitter and Instagram. Check out his website AJSchenkman.com and his new podcast authorajschenkman.podbean.com



Rich Jankowski
President, OBCWRT

Notes from the President

This month we begin our new adventure at the Rohrer Center in Cherry Hill. Plan to arrive early to review our new location. I will not be in attendance this month, as I will be away, so you will need to break it in with Vice-president **Kathy Clark** leading you. We are in a strong position moving into the summer months and ready to continue to grow our group.

Thank you for your support of our team.

Last month **Drew Gruber** visited us at the River Winds Community Center to share his knowledge about the Battle of Eltham's Landing. It was an enjoyable and informative evening, as Drew also told us about what is happening with Civil War Trails. We currently sponsor the bi-lingual sign at Ox Hill and are working to get one erected at Williamsburg. This month **A. J. Schenkman** will present on his book “Unexpected Bravery: Women and Children of the Civil War.” Invite those you know to join us for an interesting evening to learn about another aspect of the War. Our interesting programs continue to educate and inspire many who view them. If you are unable to attend on the meeting night most of our presentations area available on our YouTube page.

Meeting Notice

Join us at 7:15 PM on Thursday, June 9, at a new in-person location this month: Camden County College, William G. Rohrer Center, Room 106B, 1889 Marlon Pike East, Cherry Hill, NJ 08003.

The program will also be simulcast on Zoom for the benefit of those members and friends who are unable to attend.

Effective May 25, 2022, Camden County College will require wearing of masks in all indoor public spaces on all campuses, regardless of vaccination status, until further notice. Exceptions to this policy may be made for persons seated in indoor areas designated for eating, and for events that allow a designated speaker to maintain a distance of at least six feet from other masked attendees.

We will meet at Ponzio's Diner, 7 NJ Route 70, Cherry Hill, NJ 08034 at 5:30 PM before the meeting for dinner and fellowship.

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Our 45th anniversary picnic was a soggy but fun event. All who visited the Prentiss backyard enjoyed fellowship, discussion and good food. We celebrated Old Baldy's 170th birthday and planned for more good times ahead. The South Jersey History Fair will be on June 11th at Gabreil Daveis Tavern in Glendora. If you have not signed up for a session to staff our display, please do so soon. If you cannot commit, stop by and visit our crew, it will be a fine event.

It was great to see ten OB members at the laying of the Old Baldy wreath at the tomb of General Winfield Scott Hancock. **Susan Kovacs Cavanaugh** graced us at the event and it was great to see **Steve and Irene Wright, Wayne Blattner** was a welcomed attendee. Thank you to **Debbie Holdsworth** for making another beautiful wreath and **Bill Holdsworth** for coordinating our involvement at the County event. Regular attendees **Harry Jenkins, Jim Heenehan** and **Walt Lafty** were present. A treat for those at the event was seeing long-time friend of and supporter of OB CWRT, **Paula Gidjunis** receive recognition for her years of dedication to the Montgomery Cemetery. (See photos of the event in this newsletter)

The topic of next edition of the Camden County History Alliance magazine will be first responders. If you would like to write an article or sell/purchase an advertisement or patron, the deadline for submission is July 22, 2022. The form will be sent out to you this month. We are making progress on our reusable bag project and will let you know when they are available. Thank you to **Mike and Denise DiPaolo** for sorting our book collection, making it better to manage. Once they are organized, we will look into making some available to members and the public.

When you travel over the next few months, consider writing about your adventures in our newsletter. Let us know if you need Flat Old Baldy to accompany you on your journey. Thank you for spreading our message by sharing our newsletter and rack cards with others. Use our membership roster to check in on a fellow member you have not seen in a while.

The OB CWRT wishes you and your family a safe and enjoyable Independence Day Holiday. Take time to be appreciative of all we have in the nation and with this great organization.

Stay safe.

Rich Jankowski, President



New Member



Karl Walko of Audubon, NJ who joined the round table during the pandemic.

Today in Civil War History

1861 Sunday, June 9

Eastern Theater

On the peninsula Butler prepares to ferry troops across Hampton Creek. There they will operate in conjunction with a column from the encampment at Newport News, which is moving towards an isolated enemy outpost at Little Bethel Church. This is the most advanced position of a strong enemy force centered on Yorktown, about 25 miles from Fortress Monroe. Five miles from Little Bethel is the Church at Big Bethel, around which is entrenched a 2000-strong Confederate force under the command of Colonel John B. Magruder. A graduate of West Point, the hot tempered Virginian is known as "Prince John" from his elaborate personal lifestyle.

1862 Monday, June 9

Eastern Theater

Jackson throws his whole army across the Shenandoah against Shields, burning the bridge behind him. Several Confederate attacks are repulsed, until

a brigade marches through dense forest to make a flank attack coordinated with another frontal assault, and throws the Federals back. Frémont arrives at the end of the action, but is on the wrong side of the river and can contribute nothing. Surprisingly, the Federal forces in the valley now give up the pursuit of Jackson, having received orders to take various posts in the Shenandoah Valley to "guard against the operations of the enemy." The battle of Cross Keys has cost Frémont 125 killed and 500 wounded, while Ewell's division loses 42 dead and 230 wounded. Port Republic has cost Shields 67 killed, 361 wounded, and 574 missing. Jackson's losses in the same battle total 88 killed, 535 wounded, and 34 missing.

1863 Tuesday, June 9

Eastern Theater

On a fine misty morning, the Union cavalry crosses the Rappahannock and drives in Stuart's picket line. Some 11,000 Federal troopers surge from the riverbank toward Brandy Station, and Stuart counter-attacks with a similar number of horsemen. It is the greatest cavalry fight of the war and the Union cavalry come within an ace of overrunning Stuart's headquarters. But the Confederates hold their ground and reports of Confederate infantry arriving lead Pleasanton to withdraw. However, the Union troopers know they have held their own against Stuart's cavalry on their home ground, and their confidence soars.

1864 Thursday, June 9

Eastern Theater

General Butler attacks Petersburg, Virginia, with 4500 men, but is driven off by P.T. Beauregard with 2500 troops. At Cold Harbor the Army of the Potomac begins to extend its lines. Grant is planning to shift his operations to the James River.

"the Old Baldy 170th Birthday Celebration and Old Baldy Civil War Round Table 45th Anniversary Picnic"

By Kathy Clark,
Vice President,
OBCWRT



On a rainy, damp Saturday Old Baldy members came together to celebrate Old Baldy's 170th birthday and Old Baldy Civil War Round Table's 45th Anniversary. What is a better way to celebrate these two events than with a picnic with members coming together to celebrate and enjoy each other's company. That way we get to know each other a little better. We decided to change our location from Fairmount Park as we did last year to enjoying the hospitality of **Paul and Susan Prentiss**. They opened their doors and hearts to us with a welcome and a smile to take away the damp and gloomy day. Even though it was a bit damp with rain showers on and off we had wonderful seats under their pergola. Everyone brought a food item or other things for the food table with Paul enjoying his role as barbecue chef flipping hamburgers and hot dogs to the delight of all who were waiting to enjoy.

One of the main attractions of our picnic was Paul and Susan's very large pet, Finn, who took clues from his owner and continued to spread good wishes to everyone who attended. From time to time he would come over to get a scratch behind the ear or a rub down his back. There were times when Paul had to be quite aware of Finn as he was barbecuing for Finn would like to snatch a hot dog right off the grill. He could very easily take whatever he wanted right off the table. Despite these facts he was a good dog who only wanted to meet and greet all members.



There were members we know well and those we have not seen for a while. It was a chance to catch up with them and see what was happening in their life. It was great seeing Arlene and Roger and Nancy Bowker and her husband who we have not seen in quite a while. I am sorry to say Nancy left her horse at home this time for he was too cozy at home to come out in the rain. It was good seeing Amy and Dan Hummel again and were glad they brought their canopy to help keep areas dry along with the tarp that Paul put up to shelter the food. Another member, Harry Jenkins, was caught in a traffic jam which took him over two hours to finally get to Marlton. When he finally arrives, we all clap and gave a big shout out to Harry as he entered the back yard.

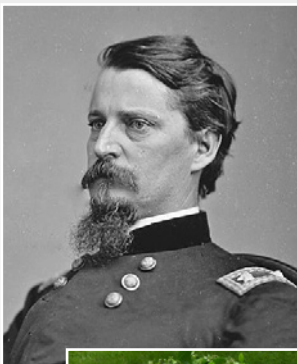
Finally, it was time for a piece of cake with the anticipation of enjoying every bite. Of course, we sang "Happy Birthday" to Old Baldy and had a group photo taken by Rich for posterity. Despite the gloom the sun was shining at 16 Heather Drive this Saturday. A big shout out to Paul and Susan for opening their home to us. We could not ask for anything other than sunshine in our heart and the joy of attending a day of good spirit, a laugh or two, and the fun coming together for this social event. I also think Finn enjoyed himself with a lick or two of cake which he took right off the table. Oh well! This enjoyment was meant for both man and animal.

Thank you, Paul, and Susan, for all that was great and wonderful. You brought fun to a day full of celebration which could only have happened with the right planning and organization, celebrating with spirit and dedication to Old Baldy. You made Old Baldy proud as he stands with General Meade

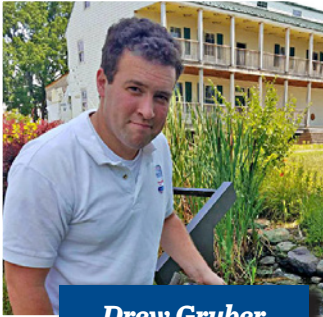
atop his pedestal in Fairmount Park with a stamping of his hoof and bowing of his head, and proclaiming "Huzzah" to all.

“Old Baldy's Tribute to Winfield Scott Hancock ”

Old Baldy CWRT payed tribute on this Memorial Day weekend to the tomb of General Winfield Scott Hancock at Montgomery Cemetery in Norristown, PA. OBCWRT members and friends attending were Susan Kovacs Cavanaugh, Harry Jenkins, Jim Heenehan, Steve and Irene Wright, Wayne Blattner, Bill and Debbie Holdsworth and Paula Gidjunis (Paula G was recognized for her years of service to the cemetery).



By Kathy Clark,
Vice President,
OBCWRT



Drew Gruber



Old Baldy's May Meeting Review

The Battle of Eltham's Landing and the NJ Brigade

presented by Drew Gruber

As part of the Peninsular Campaign, Confederate General Joseph E. Johnston withdrew his forces at the Battle of Yorktown on May 3, 1862. McClellan was surprised and was not prepared to pursue Johnston. The goal was reaching Richmond. McClellan's plan first uses Fort Monroe as the base of operation for Union troops on May 4th. McClellan had his troops on transports to move to the Eastern end of Richmond and York River Railroad. He ordered half of Brigadier General William B. Franklin's troops to get onto transport ships on the York River to land and cut off Johnston's retreat. The troops wanted to get behind Johnston and attack his wagon train as they withdrew. It took two days to get all the men and equipment onto the ships with their destination Eltham's Landing (between Richmond and York River Railroad).

For McClellan's men to get to Johnston's army the Union built 70 pontoon boats, a floating wharf, built with pontoons, canal boats, and lumber so that artillery and supplies could be unloaded. The 1st and 2nd NJ Brigades worked together to get this project completed. McClellan and troops got on the boats and went around the Confederate ships landing on the night of May 6th on Blackhouse Landing on the Confederate side. Brigadier General Henry A. Slocum and Philip Kearny were supporting the rear but were pushed back by Brigadier General John Bell Hood. He kept advancing but was concerned about casualties in the thick woods thus ordered his men to advance with unloaded rifles.

A second brigade followed Hood on the left. Union troops retreated from the woods in the plain before reaching the landing. The Confederate troops saw the Federal gunboats that were firing toward them but did not realize how close they were to these gunboats and retreated. Confederate troops left; Union troops went back into the woods and made no further attempt to advance. By 3pm the battle was over with the NJ troops holding the landing. No clear victory was had by either side. There were 194 Union casualties, 48 Confederate and 253 men wounded.

With Drew's interest in Civil War history brought to light this small battle even though there was no clear winner. No matter what the presentation

Drew's enthusiasm makes his story that much more interesting. With all that Drew does for the Civil War community we were honored to

have him speak to us in person at our roundtable. He always had a subject that we can all learn more about. Thank you Drew for being part of our meeting again. Every time you visit is truly a pleasure.

Presenter Book Winner - Joh Galie

**Dan Casella , Barney Yetter, Susan Prentiss won the \$1 raffle
Arlene Schnaare and Jim Heenehan won the attendees raffle**

“The Affair at Hunterstown”

Continued from the May Issue

The appearance of these far-ranging Federal scouts warned Hampton that the enemy was approaching his rear. He reported to Stuart who, having returned from seeing General Lee, was standing with Captain Cambell Brown of Ewell's staff about where Ewell's infantry pickets joined those of the cavalry, perhaps on Brinkerhoff Ridge. They saw Union cavalry poke its nose out of the woods east of Hunterstown, move toward the village, then pull back. This maneuver, repeated, puzzled Stuart. He rode off to consult with Fitz Lee,

but soon received word that Crawford's squadron in Hunterstown was being forced to withdraw under heavy pressure. He ordered Hampton to return with

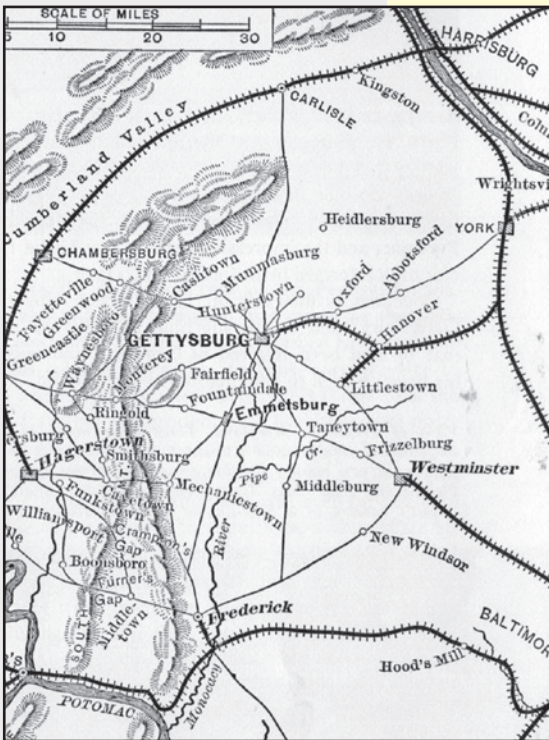
his brigade to Hunterstown to protect the flank and rear of the army and hold in check the Yankee cavalry in that area. Hampton started back with his brigade, and before he reached the woods south of the Gilbert farm he was met by Crawford's squadron, considerably cut up, that had just been driven out of Hunterstown. Hampton began deploying his leading elements. It was about 4 p.m.

Shortly before four o'clock the people in and about Hunterstown heard a scattering of shots to the southeast, toward Guldens, where a freight depot on the railroad had been burned by Early a few days before. Soon Crawford's pickets, who had been out on the road as far as the Gettysburg-York Pike, came dashing in, followed by a detachment of Federal cavalry who pulled up short of the town when they saw groups of Rebels scurrying in from the outlying farms.

A few minutes later the head of Kilpatrick's column appeared on the knoll at McCreary's house, three quarters of a mile to the east. They formed a line across the road and began throwing out skirmishers. A battery of horse artillery galloped up and dropped trails in position in front of the house. Crawford formed his squadron in the village square, his purpose being to delay the enemy advance until the rest of Hampton's brigade could come up. It was suicidal, for the Federals were in great strength and fully as mobile as the Confederates.

Teenager Jacob Taughenbaugh, who lived in the old stone house south of the town, and had been driving in the stock that the Rebels had not confiscated, came up to where his father's lane joined the main east-west road running through town. He was standing there talking to his uncle when the pickets came in and the firing started; as is so often the case in fights of this kind, the civilians did not all hide—they were more curious than frightened. Soon General Kilpatrick and his staff rode up and questioned young Taughenbaugh as to the lay of the land and the size of the enemy force in the village. The boy told him that there were fewer than a hundred Rebels, and that they were a part of Stuart's cavalry, that had gone towards Gettysburg. Kilpatrick charged into Hunterstown with a squadron of the 18th Pennsylvania under a Captain Estes, according to New York Times correspondent Edward A. Paul, who was with the division. They met Crawford's men in the town square, where a lively saber fight occurred. According to civilian witnesses, the fight wound up in a dead-end alley along the Gettysburg road to the Gilbert farm.

The Federals then occupied the town, with a line of skirmishers along the somewhat higher ground a few hundred yards to the south, and detachments blocking the roads to the west, north, south, and east. Kilpatrick set up his headquarters in the George Grass Hotel on the southwest corner of the square. Farnsworth's brigade occupied the ground along the ridge to the west of the Gettysburg road, and Guster's brigade to the east thereof. After some preliminary skirmishing disclosed that Confederate units were forming in the vicinity of the Gilbert farm three quarters of a mile out the Gettysburg road, Kilpatrick ordered Custer to send a squadron in that direction, presumably to develop the enemy strength and dispositions. In his report he explained that he took this action to cover the emplacement of his two batteries. His efficient artillery, under Pennington and Elder, would give him an advantage over Hampton, who at this time was unaccompanied by artillery. Pennington's battery went into position on the east side of the Gettysburg road and Elder's Battery E, 4th U.S. Artillery on the west side. Each battery was supported by cavalry concealed north of the ridge. Custer formed his assault column, consisting of Captain Henry E. Thompson's squadron of the 6th Michigan, near the Felty farm. The rest of the regiment was massed behind (north) of the red brick farm buildings, except that a dismounted company of sharpshooters took position in the waist-high wheatfield on the opposite side of the road. Armed with repeating



**Brigadier General
Wade Hampton**



**Brigadier General
Judson Hugh Kilpatrick**



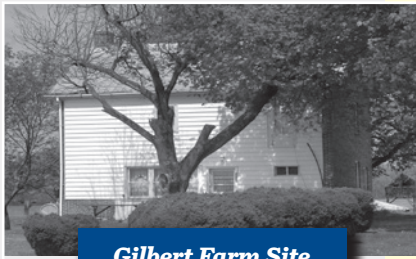
Jacob Grass Hotel



Gilbert Ridge



**Brigadier General
George Armstrong Custer**



Gilbert Farm Site



Felty/Tate Ridge



Hunterstown

carbines, they formed line at an angle to the road so that they could enfilade any counter-charge by the enemy. The right-of-way of the road was broad enough for eight men to form abreast, and perhaps the column was so formed. The attack was canalized by the roadside fences, and it would have been more prudent and just as effective to have advanced dismounted until the probe cleared up the enemy situation. But that was not the cavalry way. Custer himself went at the head of the

squadron, which charged headlong down the road toward the enemy.

Hampton received the charge with Cobb's Georgia Legion in the center; Phillips' Legion lined up on their right, and the 1st South Carolina Cavalry on the left. His other three regiments were in rear in support, though perhaps they had not all arrived when Custer launched the charge. They were far too much for Thompson's eighty troopers, who were soon cut to pieces in the hacking contest that swirled around and between the Gilbert farm buildings. Thompson and Lieutenant S.H. Ballard were wounded. Thompson was taken up behind a trooper and made his escape, but Ballard was captured. Custer, too, was dismounted, and narrowly escaped being shot at close range. But he made off behind a Michigan trooper named Churchill. The squadron, assailed in front and on both flanks, withdrew rapidly toward the Felty farm, closely pursued by the yelling and shooting Cobb's Legion. They had lost thirty-two men, nearly half their strength. The Michiganders were prepared for this. As the Legion came opposite the Felty place the sharpshooters stood up in the wheatfield and poured rapid fire into them from breechloaders. The Georgians recoiled, and as they withdrew took further losses from Pennington's guns, that were high enough to shoot over the heads of their own cavalry. Hampton wrote in his report: "The Cobb Legion, which led this gallant charge, suffered quite severely, Lieutenant Colonel Deloney and several other officers being wounded, while the regiment lost in killed and wounded quite a number of brave officers and men whose names I regret not being able to give."

The red ball of the sun was rolling down behind the oak forest to the west of Kilpatrick's line as the Confederates withdrew into Gilbert's woods. Hampton had sent for some artillery, and two guns of Green's battery of Hilary Jones's battalion now arrived and engaged the Union artillery in an unequal duel. The firing continued long after dark, until fifteen of Green's men had been hit, virtually his entire detachment. Hampton withdrew to Brinkerhoff Ridge, leaving the customary picket lines as security. Alfred Pleasonton, the Federal cavalry corps commander, showed his mettle on this July 2—and it was mostly pot metal. Buford's division had effectively covered the left flank of the Federal army until about noon, when Pleasonton, for no good reason, jerked it out and sent it to Westminster to guard a railhead against an enemy threat that had evaporated four days earlier. This left Meade's south flank wide open, so that Longstreet was able to march his big corps virtually undetected, and certainly unopposed, to a position on that flank, from which he launched his powerful attack on that afternoon. Having thus uncovered Meade's south flank, Pleasonton now, at 11 p.m., proceeded to do the same to the north flank by taking Kilpatrick, firmly established at Hunterstown, on a dreary night march to the wooded and boulder-strewn slopes of Big Round Top, an area wholly unsuitable for cavalry operations. That Custer's brigade never got there but remained in the center where it helped Gregg defeat Stuart on the 3rd, was no fault of Pleasonton. As Charles Francis Adams, Jr., said in the previously quoted letter: "Pleasonton, next to Hooker, is the biggest hum-bug of the war."

On the morning of the 3d Hampton, learning from his outposts that the Federals had gone, reoccupied Hunterstown. He gathered up the wounded and placed them in the Presbyterian Church, the Grass Hotel, the King house, the general store, and the Gilbert home. The dead were laid out in a row in front of King's store to be



King's Store

prepared for burial by a local undertaker named Deatrick. Young Taughenbaugh saw them there, and visited the wounded as did other townspeople, to feed and nurse them. Hampton held the town until July 4, when he marched west toward Cashtown, as a part of Lee's general withdrawal. The Confederates apparently suffered about 100 casualties in the fighting in the town and along the Gettysburg road. Taughenbaugh saw thirteen of them buried on the ridge where the Federal artillery had been in position. None of the graves can be identified today. Kilpatrick reported thirty-two dead and wounded. His division numbered some 3,500 and Hampton's brigade possibly 2,000. This was not the first time that Kilpatrick and Hampton had tangled, and it was not to be the last. But both survived the war. Hampton was badly wounded on July 3d and Farnsworth was killed.

George Armstrong Custer

A monument to the Michigan Cavalry Brigade in a charge against Confederate troops along the Hunterstown Road. In the charge Custer's horse was shot out from under him and he was standing in the way of Confederate Cavalry charging in his direction. Trooper Norvell Francis Churchill of the 1st Michigan deflected a saber blow and pulled Custer to the back of his horse, saving Custer from death or injury.

Location: Intersection of Hunterstown Road and Shrivvers Corner Road



**Trooper-Private
Norvell Francis Churchill**

Woman's Work in the Civil War, 1868

“Loyal Women of the South”

We have already had occasion to mention some of those whose labors had been conspicuous, and especially Mrs. Sarah R. Johnson, Mrs. Nellie M. Taylor, Mrs. Grier, Mrs. Clapp, Miss Breckinridge, Mrs. Phelps, Mrs. Shepard Wells, and others. There was however, beside these, a large class, even in the chief cities of the rebellion, who not only never bowed their knee to the idol of secession, but who for their fidelity to principle, their patient endurance of proscription and their humanity and helpfulness to Union men, and especially Union prisoners, are deserving of all honor.

The loyal women of Richmond were a noble band. Amid obloquy, persecution and in some cases imprisonment (one of them was imprisoned for nine months for aiding Union prisoners) they never faltered in their allegiance to the old flag, nor in their sympathy and services to the Union prisoners at Libby and Belle Isle, and Castle Thunder. With the aid of twenty-one loyal white men in Richmond they raised a fund of thirteen thousand dollars in gold, to aid Union prisoners, while their gifts of clothing, food and luxuries, were of much greater value. Some of these ladies were treated with great cruelty by the rebels, and finally driven from the city, but no one of them ever proved false to loyalty. In Charleston, too, hot-bed of the rebellion as it was, there was a Union league, of which the larger proportion were women, some of them wives or daughters of prominent rebels, who dared everything, even their life, their liberty and their social position, to render aid and comfort to the Union soldiers, and to facilitate the return of a

government of liberty and law. Had we space we might fill many pages with the heroic deeds of these noble women. Through their assistance, scores of Union men were enabled to make their escape from the prisons, some of them under fire, in which they were confined, and often after almost incredible sufferings, to find their way to the Union lines. Others suffering from the frightful jail fever or wasted by privation and wearisome marches with little or no food, received from them food and clothing, and were thus enabled to maintain existence till the time for their liberation came. The negro women were far more generally loyal than their mistresses, and their ready wit enabled them to render essential service to the loyal whites, service for which, when detected, they often suffered cruel tortures, whipping and sometimes death.

In New Orleans, before the occupation of the city by the Union troops under General Butler, no woman could declare herself a Unionist without great personal peril; but as we have seen there were those who risked all for their attachment to the Union even then. Mrs. Taylor was by no means the only outspoken Union woman of the city, though she may have been the most fearless. Mrs. Minnie

Don Carlos, the wife of a Spanish gentleman of the city, was from the beginning of the war a decided Union woman, and after its occupation by Union troops was a constant and faithful visitor at the hospitals and rendered great service to Union soldiers. Mrs. Flanders, wife of Hon. Benjamin Flanders, and her two daughters, Miss Florence and Miss Fanny Flanders were also well known for their persistent Unionism and their abundant labors for the sick and wounded. Mrs. and Miss Carrie Wolfley, Mrs. Dr. Kirchner, Mrs. Mills, Mrs. Bryden, Mrs. Barnett and Miss Bennett, Mrs. Wibrey, Mrs. Richardson, Mrs. Hodge, Mrs. Thomas, Mrs. Howell, Mrs. Charles Howe of Key West, and Miss Edwards from Massachusetts, were all faithful and earnest workers in the hospitals throughout the war, and Union women when their Unionism involved peril. Miss Sarah Chappell, Miss Cordelia Baggett and Miss Ella Gallagher, also merit the same commendation.

Nor should we fail to do honor to those loyal women in the mountainous districts and towns of the interior of the South. Our prisoners as they were marched through the towns of the South always found some tender pitying hearts, ready to do something for their comfort, if it were only a cup of cold water for their parched lips, or a corn dodger slyly slipped into their hand. Oftentimes these humble but patriotic women received cruel abuse, not only from the rebel soldiers, but from rebel Southern women, who, though perhaps wealthier and in more exalted social position than those whom they scorned, had not their tenderness of heart or their real refinement. Indeed it would be difficult to find in history, even among the fierce brutal women of the French revolution, any record of conduct more absolutely fiendish than that of some of the women of the South during the war. They insisted on the murder of helpless prisoners; in some instances shot them in cold blood themselves, besought their lovers and husbands to bring them Yankee skulls, scalps and bones, for ornaments, betrayed innocent men to death, engaged in intrigues and schemes of all kinds to obtain information of the movements of Union troops, to convey it to the enemy, and in every manifestation of malice, petty spite and diabolical hatred against the flag under which they had been reared, and its defenders, they attained a bad pre-eminence over the evil spirits of their sex since the world began. It is true that these were not the characteristics of all Southern, disloyal women, but they were sufficiently common to make the rebel women of the south the objects of scorn among the people of enlightened nations. Many of these patriotic loyal women, of the mountainous districts, rendered valuable aid to our escaping soldiers, as well as to the Union scouts who were in many cases their own kinsmen. Messrs. Richardson and Browne, the Tribune correspondents so long imprisoned, have given due honor to one of this class, "the nameless heroine" as they call her, Miss Melvina Stevens, a young and beautiful girl who from the age of fourteen had guided escaping Union prisoners past the most dangerous of the rebel garrisons and outposts, on the borders of North Carolina and East Tennessee, at the risk of her liberty and life, solely from her devotion to the national cause. The mountainous regions of East Tennessee, Northern Alabama and Northern Georgia were the home of many of these loyal and energetic Union women—women, who in the face of privation, persecution, death and sometimes outrages worse than death, kept up the

courage and patriotic ardor of their husbands, brothers and lovers, and whose lofty self-sacrificing courage no rebel cruelties or indignities could weaken or abate

Blue and Gray Chemistry

New ways of killing men were invented during the war but so were dehydrated vegetables, condensed milk, and various medicinal substitutes.

**By David B. Sabine
CWTI, October 1969**



**Brigadier General, USA
James W. Ripley**



**Colonel, CSA
Josiah Gorgas**



Lamot Du Pont

After the fall of Fort Sumter a horde of inventors and pseudo scientists descended on Washington with all kinds of devices and schemes to end the war overnight. Lincoln was interested in anything that might shorten the war, yet he realized he could not give personal attention to so many details. Unfortunately he was further handicapped by the attitude and stupidity of the men from whom he could rightfully expect technical advice. For example, General in Chief Winfield Scott was senile and General J. W. Ripley, head of the Ordnance Department, hadn't had a new idea since the Mexican War.

Lincoln wanted to organize the scientific capability of the country and at length, in March 1863, he persuaded the Congress to charter the National Academy of Sciences.

Jefferson Davis was more fortunate. He selected Colonel Josiah Gorgas, one of the ablest technical advisers on either side, to head the Confederate Ordnance Bureau, which was charged with producing all the weaponry and technical supplies needed for warfare.

A primary concern of both sides was, of course, production of gunpowder. Most powder mills were in the North, the South having only one of any significant capacity—at Nashville, Tennessee. E. I. Du Pont de Nemours, on Brandywine Creek, Pennsylvania, was the largest powder maker in the nation and the one producing the most reliable and uniform product. Furthermore, their chief chemist, Lamot Du Pont, a 30-year-old graduate of the University of Pennsylvania, was the country's leading authority on the chemistry of explosives.

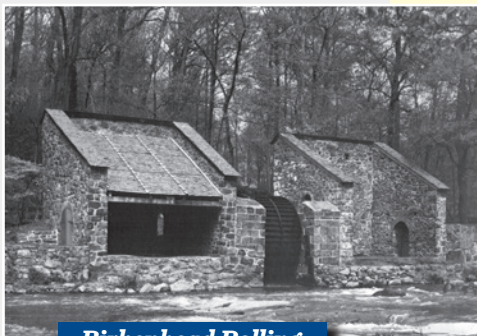
The critical component of gunpowder was potassium nitrate, commonly called niter or saltpeter, and the principal source was in British-controlled India. For the North, this had the disadvantage of any monopoly; for the South there was the added difficulty of importation through a blockade. In the Confederacy, however, there were many caves whose earth contained substantial amounts of niter. The North had none of these but did have access to the Chilean deposits. These deposits were, however, sodium instead of potassium nitrate. Seemingly this was a small matter but Chilean niter absorbed moisture from the air so readily that gunpowder made with it quickly became damp and unfit for use.

In an effort to break the British monopoly, Lamot du Pont had, before the war, perfected a process for using Chilean saltpeter but not for gunpowder. Now, spurred on by the emergency, and working with suggestions he found in his grandfather's notebooks, Lamot developed a method for converting Chilean niter to the desired potassium compound. While this accomplishment did not make the North independent of Britain, it helped. It also saved money, as the Chilean ore was much lower in price.

Young Du Pont also made a very important modification in gunpowder. Captain Thomas J. Rodman of the Ordnance Department had devised a way of casting cannon on a hollow core cooled with running water, eliminating the long process of boring and making possible guns of 14-, 15-, and even 20-inch caliber. Unfortunately these huge cannon burst all too frequently. Rodman felt that too much pressure was generated in the breech and found a way to measure it; but he did not discover a remedy.

Examining Rodman's data, Lamot du Pont decided that the grain of powder as then manufactured was too fine. It burned too quickly, exerting a blasting

rather than a propelling force. He and Rodman developed a powder with grains ranging in size from walnuts to baseballs, which burned at a slower rate. The released energy took the line of least resistance—the open barrel—practically eliminating the danger of bursting.



Birkenhead Rolling Mills - Du Pont

These large cannon with this so-called "Mammoth" powder fired heavier projectiles a greater distance. Henry Wurtz, a prominent chemist, tried to improve on this. He submitted an explosive which he claimed produced increasingly greater pressure as the shell travelled up the bore of the gun. This sounded fine but when an 8-inch test gun burst into small fragments (Lincoln, observing, narrowly escaped injury) everyone quickly lost interest.

When one Isaac Diller brought to Lincoln's attention a German secret formula for which he was acting as agent, the President's interest was aroused. The secret lay in the use of chlorate instead of nitrate so Lincoln borrowed Charles W. Wetherill from the Department of Agriculture to make an intensive investigation.

Wetherill was a Pennsylvanian who had studied in Europe under Dumas, Gay-Lussac, and other noted scientists. When the Department of Agriculture was created by Congress in 1862 he was named the chief (and at the time only) chemist. He found that powder made by the German formula exploded but not always at the expected time. He worked on this problem of stability for almost a year, thereby causing the famous Wetherill case. Commissioner of Agriculture Newton fired Wetherill for neglecting his regular job. Although he had been detailed for the experiments by the President, Wetherill had to get an act of Congress to recover his job. He eventually solved the powder problem but by that time the Chilean saltpeter was being converted at the rate of fifty tons a month. British niter was coming in with a comfortable regularity, so the project was dropped.

However, Wetherill as chief chemist of the Department of Agriculture did make an important contribution to the war effort. He published a report on the raising of sorghum that helped Northern farmers produce a substitute for the molasses and sugar no longer coming in from Louisiana.



**Colonel, CSA
George W. Rains**

Meanwhile the Confederates were also striving to produce more niter. Gorgas put Colonel G. W. Rains, who had taught chemistry at West Point before the war, in charge of the procurement of gunpowder and gave him carte blanche. Rains was an able administrator, a good judge of men, and very competent in both chemistry and engineering. He took over and enlarged the mill at Nashville and designed and erected a great powder works at Augusta, Georgia, which was larger, even, than du Pont's.

Rains found that by steaming a pre-mix of niter and charcoal, he could reduce the milling time required after the addition of sulfur. He theorized that the niter crystallized within the pores of the charcoal thus providing a greater supply of oxygen on ignition. Whatever the reason, this improvement shortened manufacturing time and produced a higher quality gunpowder.

Selecting Isaac M. St. John, another competent engineer and administrator, to head the Niter and Mining Bureau, Rains began to exploit native sources of niter to supplement that slipping through the blockade. Rains and St. John developed a process for extracting saltpeter from the earthen floors of caves, smoke houses, tobacco barns, and similar places where there were rotted organic deposits. With pots, troughs, barrels, and other crude equipment they leached out the nitrates, added lye to convert the calcium niter to the potassium compound, and crystallized from this solution a surprisingly pure potassium nitrate. This was sent to Augusta for further purification and use as an ingredient of gunpowder. They found that twelve barrels of "good" earth produced at least 100 pounds of saltpeter.



**Brigadier General, CSA
Isaac M. St. John**

They also set up "niter beds" or "nitrieries" in various places around the country. These were simply ricks into which dead animals and other organic refuse of all kinds was composted. In some areas they established a collection service for the contents of household chamber pots and added this nitrogen-rich material to the beds. As the contents of these ricks decayed, bacteria converted the organic nitrogen to nitrates that could be leached out

and treated like the washings from the cave earths. These noisome spots were a valuable supplement to other nitrate sources. By the end of 1864 Gorgas estimated that there were over one and a half million cubic feet of earth in various stages of nitrification, from which he expected to get a pound and a half of niter per cubic foot. However, this was a long-range project and the war was over before extraction began.

Charcoal for gunpowder had to be made from a porous, fine-grained wood that left little ash when burned.

Willow was preferred but Rains found that the cotton-wood tree, so abundant along the banks of the Savannah River, was equally satisfactory as a source. Sulfur came from a large stock that the sugar planters had imported just before the outbreak of hostilities. When this was gone, Rains roasted pyrite ores, plentiful throughout the South, and purified this crude sulfur by distillation.



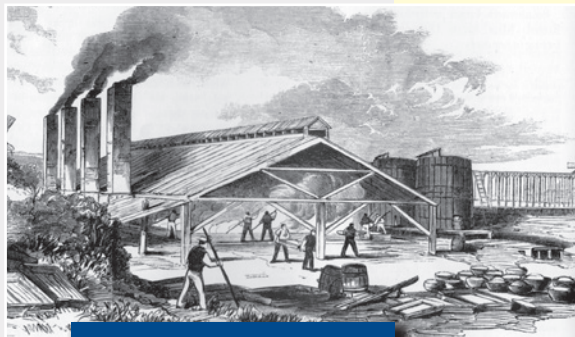
Lieutenant Colonel, CSA
Joseph W. Mallett

Joseph W. Mallett, selected by Gorgas to head the central laboratory at Macon, Georgia, was an able chemist of international renown. He was responsible for a number of innovations in the production of weapons, including a polyhedral shell which burst into an equal number of fragments.

One of his first problems was the supply of fulminate of mercury for percussion caps. Mercury came in through the blockade via Mexico but he needed nitric acid, which was made from sulfuric acid. Neither of these chemicals had ever been manufactured in the South, so he collected enough lead to set up the lead chamber process for producing sulfuric acid and from that and niter prepared the needed nitric acid. When supplies of mercury were cut off owing to the fall of Vicksburg, Mallett found that a mixture of sulphuret of antimony and chlorate of potash made an acceptable substitute as long as the caps were kept dry.

Under Mallett's direction the LeConte brothers and Pratt, Clemson, Holmes, Tuttle, and other prominent scientists tested and experimented, and scoured the Confederacy for raw materials. They found lead, copper, coal and iron, saltpeter, and salt in places where they had not been known to exist or at best had been only partially exploited.

The supply of common table salt was critical all through the war. Much beef and pork spoiled or could not be held for later use because of the lack of this preservative. M.J.R. Thomassy, a French-born geologist who had studied the Italian solar evaporation process, improved the Confederate method and built evaporation plants along the Atlantic and Gulf coasts for making salt from sea water. This provided an important supplement to the salt coming from the wells at Saltville, Virginia but was never a sure source because the works were vulnerable to destruction by the Federal Navy.



Salt Processing Plant

Chemists in the North were busy, too. Levi Short perfected a "Greek Fire," probably phosphorus dissolved in carbon disulfide. McClellan had 300 shells containing this material but for reasons not stated returned most of them to the arsenal at Fortress Monroe. Admiral David Porter fired a few of these incendiary projectiles at

Vicksburg with impressive effect but so near the surrender that they did not affect the final outcome. They were also used against Charleston, and Beauregard denounced the use of ". . . the most destructive missiles ever used in war into the midst of a city taken unawares and filled with sleeping women and children." (Then he tried to get something similar to fire back at the Yankees.) Actually these incendiaries of Short's probably did more harm to the Union gun crews than to the Rebel city.

Out of thirty-seven shells fired by the "Swamp Angel" and other guns, twenty burst in or near the canno muzzle or did not burst at all. After thirty-six rounds the "Swamp Angel" exploded.

Alfred Berney invented a flame thrower, most likely using a low-boiling petroleum derivative. The Navy Department examiner enthusiastically reported it would "puzzle the Devil himself, even in his own dominions, to put it [the fire] out." But something went wrong. Eighteen months later the same examiner complained that Berney was "a cheat, humbug—as is his

liquid fire—and a most arrant coward and liar.” Even so, General Butler bought eight flame throwers with 1,500 gallons of fuel. But the records aren’t clear as to the extent to which they were used.

Man has never lacked ingenuity in devising ways to torture and kill his fellow man. The idea of poison gas, for example, was not the exclusive devilry of the 20th century although it was not actually used until then. On April 5, 1862, John W. Doughty, a New York school teacher, wrote to Secretary of War Stanton suggesting the use of chlorine. Doughty, technically competent, knew that chlorine gas is heavier than air and is easily liquified, besides being toxic. In his letter he included a diagram of a shell of two compartments containing two or three quarts of liquid chlorine in one and explosives in the other. When exploded over enemy lines, this shell would release a cloud of death-dealing gas. Doughty apparently had misgivings, but he ended his letter with the words: “As to the moral question involved in its introduction I have, after watching the progress of events during the last eight months,... arrived at the somewhat paradoxical conclusion that its introduction would very much lessen the sanguinary character of the battlefield and at the same time render conflicts more decisive in their results.”

Apparently Lincoln never saw this letter. It was probably passed on by some clerk to General Ripley of Ordnance who was congenitally immune to new ideas. Even more diabolical schemes were proposed. New Hampshire-born Forrest Shepherd, a science teacher at Western Reserve University, suggested that concentrated hydrochloric acid be put in shallow pans when the wind was blowing toward the enemy lines. The breeze would waft a mist of acid onto the Rebels with horrible results.

Captain E.C. Boynton of the Federal Army pointed out that shells filled with cacodyl, an arsenic compound, would distribute deadly arsenical fumes on exploding.

So-called “stink shells” containing sulfur, pitch, and assafetida or some equally vile-smelling but not necessarily lethal substance were used to some extent on both sides. In June 1864 W. N. Pendleton requisitioned some from Lieutenant Colonel Baldwin, Chief of Ordnance, Army of Northern Virginia. The request was forwarded to Gorgas and the reply came back “. . . stink-balls, none on hand; don’t keep them; will make if ordered.”

Other ideas, more bizarre and less practical, popped up from time to time. A Rebel speculated that the Monitor could be stopped if some daring young man would board her and pour chloroform into the observation slits. It would then be a simple matter to complete the capture while the crew were fast asleep. On the other hand a Yankee wanted to bombard the Merrimac with shells full of red pepper and take possession while the Rebs were helplessly sneezing.

Dr. J. E. Cheves, a Savannah physician, invented a shell filled with solid phosphorous. When it burst on impact, it would scatter lumps of phosphorous over the landscape, setting fires where they landed and inflicting frightful burns on any human skin they touched.

Richard S. McCulloh designed an effective incendiary bomb based on white phosphorous. He had been a professor of chemistry at Columbia University and his case is a good example of the bitterness of the times. Sympathizing with the Confederacy, he resigned his chair but the trustees, indignant at having a “traitor” on their staff, refused to accept his resignation and fired him. His dishonorable dismissal is still on the books.

The biggest incendiary plot of the war was planned around McCulloh’s bomb. A group of Southern agents arrived incognito in New York City, and registered at different hotels. Each man activated one of McCulloh’s bombs and quietly departed. These bombs, igniting shortly after activation, were to start simultaneous fires all over the city, creating a massive conflagration which the city’s fire department would be unable to control. The plot failed only because the saboteurs had not properly synchronized their activities. Instead of total destruction, the city suffered a consecutive series of small blazes which the firemen successfully extinguished.



Richard S. McCulloh

**Continue
in the
July Issue**



The Society for Women and the Civil War

“Recognizing
Women’s
Efforts,
1861-1865”

The Society for Women and the Civil War is pleased to announce the
**22nd Conference
on Women and the Civil War, The Women of the Shenandoah Valley,
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First Person Impressions of Rose O’Neal Greenhow
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Juanita Leisch Jensen presenting a rare Confederate homespun dress from
the Shenandoah Valley
Jess Pritchard-Ritter speaking on “Belle Grove’s Free
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Registration Deadline: July 15, 2022

Hotel Registration Deadline: June 17, 2022

Kevin M. Hale Award
for
best Historical Newsletter
in New Jersey

Schedule of Old Baldy CWRT Speakers and Activities for 2022

July 14, 2022 – Thursday

Peter Miele

"Talking Flags - The United States Signal Corps on
July 1 and Beyond"

August 11, 2022 - Thursday

Dr. Kenneth Rutherford

"America's Buried History:
Landmines in the Civil War"

Thursday, August 11. The meeting will return for this
month only to Camden County College in Blackwood,
NJ, in the Connector Building Room 101.

We plan to meet at the Lamp Post Diner at 5:30 before
the meeting for dinner and fellowship.

Questions to

Dave Gilson - 856-323-6484 - dgilson404@gmail.com.

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Old Baldy Civil War Round Table of Philadelphia

Camden County College

Blackwood Campus - Connector Building

Room 101 Forum, Civic Hall, Atrium

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