



The Fighting Joe Wheeler

Dispatch

Volume XXXVI, Issue 3

March, 2016

Camp Officers:

Commander: David Rawls

1st Lt Commander: David Fisher

2nd Lt Commander: Hank Arnold

Adjutant: Pat Acton

Secretary/Treasurer: Pat Acton

Chaplain: Jeff Young

Color Sergeant: Bill Hass

Quartermaster: Tristan Dunn

Commander Emeritus: Dr. Ira West

Chaplin Emeritus: Dr. Charles Baker

Sergeant At Arms: Sam Nelson

Camp Surgeon: Rick Price

Dispatch Editor: Jim Darden

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P. O. Box 43362
Vestavia Hills, AL 35243

The Next Camp Meeting will be at 7:00 pm, Tuesday March 8. Commander David Rawls will present a program on The Confederate Constitution.

SCV Calendar

March 5.....Alabama Educational Conference.....Prattville
 March 8.....Camp Meeting - CSA Constitution.....David Rawls
 March 19-20.....Alabama Gun Collectors Show.....Birmingham

April 12.....Camp Meeting - Ft Blakely.....Hank Arnold
 April 25.....CSA Memorial Day.....Elmwood Cemetery
 April 29-30.....Living History.....Confederate Memorial Park

May 10..... Camp Meeting - Battle of Bentonville.....Tim Kent

June 3.....Jefferson Davis' birthday
 June 10-12.....Alabama Division Reunion.....Cullman
 June 14.....Camp Meeting - Program TBD.....Jim Darden

July 12.....Camp Meeting - CSS Shenandoah.....Jeff Seymor

August 9.....Camp Meeting - Southern Culture.....Walter Dockery

September 13.....Camp Meeting – Program TBD.....Dr. John Killien

Visit the Camp Website - www.fightingjoewheeler.org

Please send articles or other information for inclusion in "The Dispatch" to Jim Darden - Editor 645 South Sanders Rd Hoover, Alabama 35226 or e-mail: km4qr@bellsouth.net

Alabama: We Dare Defend Our Rights

"The principal for which we contended is bound to reassert itself, though it may be at another time and in another form." - Jefferson Davis, May 1865

Commander's Report

March 2016

Compatriots:

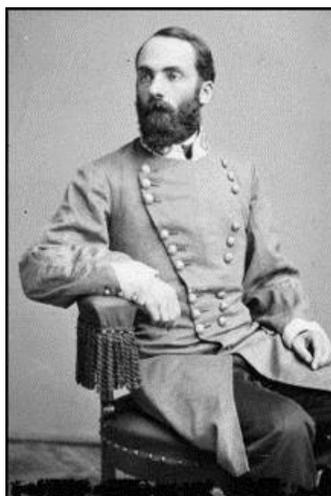
This past February 20th I was privileged to attend the State Executive Committee Meeting in Montgomery. At that time I not only learned about our organization as a whole, but also a number of ways we can improve things at the state and local level to bring about the lofty goals established by our forebears and protect the future for those who shall follow. I also received copies of applications for the upcoming Reunion in Cullman this June (and related golf tournament for those interested in participating) as well as the 2016 calendars to be distributed as needed.

I would also like to remind all that March 13th marks the 155th anniversary of the passage of the Congressional passage of the Confederate Constitution. In light of this anniversary I will be making this month's presentation at the meeting this Tuesday, commemorating the event. In this discussion we shall look at the surrounding events leading to its creation followed by a comparison and contrast to the United States Constitution, which will give us a glimpse into the true motivations of those involved as opposed to the propaganda being taught in our education system today.

So I ask you: please come and bring a friend if you can. Let us follow the doctrine as presented by General S. D. Lee and re-establish truth and honor as guiding principles for our nation.

Deo Vindice,

David L. Rawls
Commander



2nd LT Commander's Report

March 2016

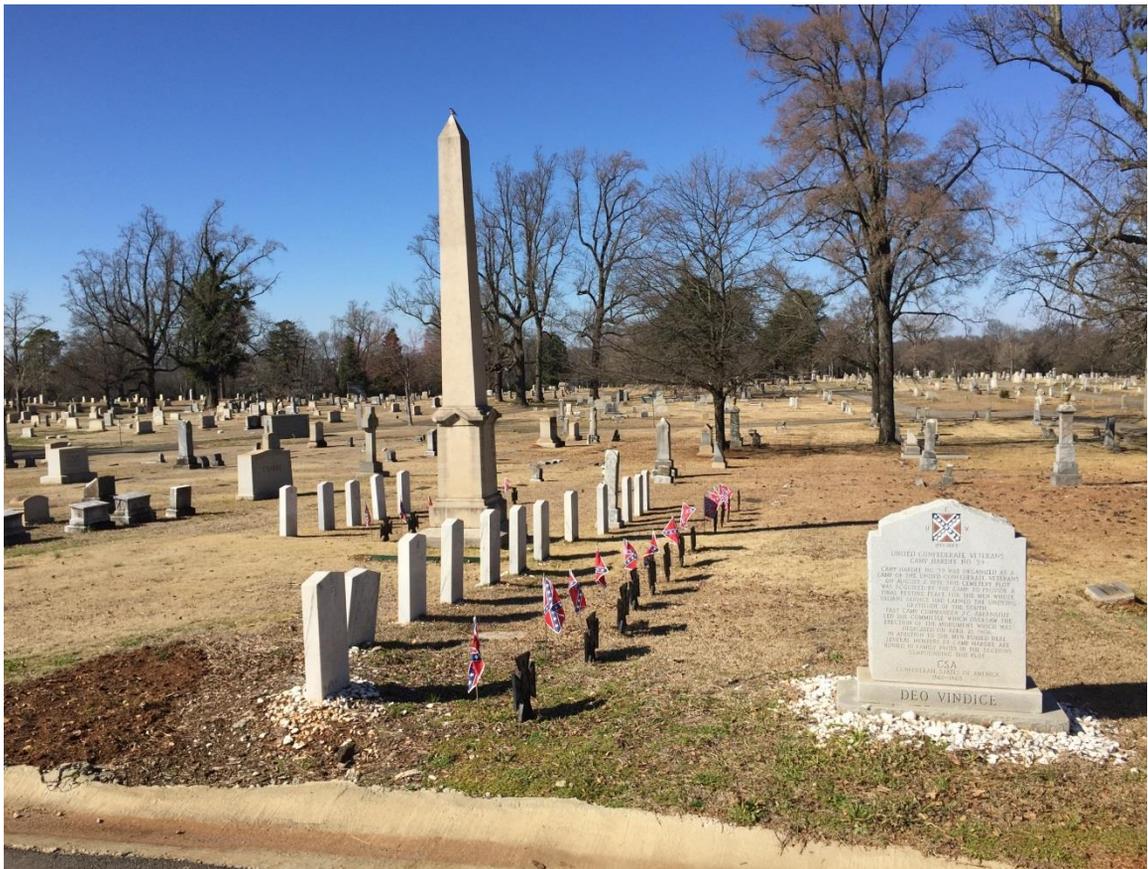
Compatriots

Please join us for our next recruiting event at the Alabama Gun Collectors Association on March 19-20, 2016. This will be a joint recruiting table with the Forrest Camp. They have helped us man the booth before. This will be a fun event. The theme will be US wars of the 20th century. I plan to get a display table for my Dad's WWII aviation relics. Please join us.

David Rawls and I attended the Division Executive Council meeting two weeks ago. It was very informative.

I hope to see all of you at the next meeting Tuesday, March 8, 2016 at 7:00 pm.

Thanks,
Hank Arnold
2nd LT Commander



Hardee Plot – Elmwood – March 5, 2016

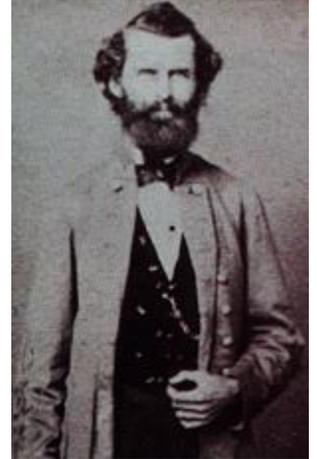
The Confederacy's Bomb Brothers – Part 2.

George and Gabriel Rains had a knack for blowing things up during the American Civil War between 1861-1865. They were the Confederacy's "Bomb Brothers."

By Peggy Robbins (edited for the Fighting Joe Wheeler Camp 1372 *Dispatch* by Jim Darden)
(see <http://www.jmu.edu/cisr/journal/6.1/notes/robbins/robbins.htm>)



George Rains (right) and his older brother Gabriel (left) created explosive solutions to the Confederacy's problems during the war. George created the gunpowder, and Gabriel used it to create landmines lethal to Federal soldiers.



This month we will pick up with brother George Rains, sometimes called the "chief chemist of the Confederacy," who was just as busy as his brother during the war. When he joined the Ordnance Bureau, Colonel Josiah Gorgas, chief of ordnance told him to get busy making gunpowder. It was up to George to determine where and how.

His task would not be an easy one. For half a century before the Civil War, there had been virtually no ammunition made in the South except during the Mexican War. A few days after the April 14, 1861, capture of Fort Sumter, the Confederate War Department reported that there was only 491,111 pounds of powder for rifles, muskets and cannons within Confederate territory. The comparatively small amount of powder (292,316 pounds) seized when the Federals abandoned the Norfolk Navy Yard in Virginia on April 20 was divided among Confederate armies gathering on the Potomac River and near Richmond and Mobile. None remained for the force assembling in Tennessee and Kentucky under General Albert Sidney Johnston. President Davis said his army had enough powder for one month of "light fighting." It was a desperate situation.

On July 10, George Rains left Richmond by rail on a mission: to enlarge and improve the South's existing powder-making facilities. "I almost lived in railroad cars," he recalled, "devising plans, examining the country for locations, hunting up materials, engaging workmen, making contracts and employing more or less every available machine shop and foundry from Virginia to Louisiana."

Gunpowder at that time was made mainly of potassium nitrate (a whitish, powdery metal also known as saltpeter or niter) with sulfur and charcoal. George knew there was very little above ground niter or sulfur in the Confederacy, so he prospected for these substance throughout the summer of 1861. In limestone caves in Arkansas, Tennessee, Alabama and Georgia he found an abundance of earth rich in nitrates. He put crews to work digging it out, and soon formed the Niter and Mining Bureau. Then he

turned two idle mills near Nashville, Tennessee, into a powder-making factory and enlarged them; by late October 1861 the factory was producing 3,000 pounds of powder a day. The operation was so successful that Rains sought to start a second plant nearer to Richmond, but could find no one capable of replacing him as overseer in Nashville. So, he wrote a booklet detailing the powder-making process, *Notes on Making Saltpeter from the Earth of the Caves*, and trained a force of men. Leaving them to run the Nashville plant, he headed for Richmond.

Rains had sent agents to Europe by way of Canada to buy more nitrate, and in time he smuggled about 2.8 million pounds through the Union blockade. Closer to home he found an untapped, if revolting supply: outhouses, latrines and chamber pots. Though the collection method was unpopular and heavily criticized, it was productive. Niter beds filled with these waste materials were established near many population centers and yielded several ounces of niter to each cubic foot. The process inspired some of the war's bawdiest songs.

By mid-November 1861, Rains was producing about 1,500 pounds of powder daily in Richmond. His two plants were producing powder at a rapid pace, but he knew it was not enough. About this time he read a booklet describing England's Waltham Abbey Works, then the world's most up-to-date powder plant. The Confederacy desperately needed a great plant like that, he told Gorgas, who agreed and allowed Rains to begin working on it.

The Waltham booklet contained no diagrams or drawings, but the instructions it provided were complete. With Shaler Smith, Rains chose Augusta, Georgia, site of a former U.S. arsenal, as the home for his new operation, the Augusta Powder Works. The complex stretched for miles along a canal and was ideal for a central supply base; it was safe from Union raiders, offered easy access to water and rail transportation to the South's main shipping points, and had sufficient willow trees to make charcoal.

With the location chosen, George searched the South for materials to build the factory. The renowned Tredegar Iron Works in Richmond, which produced up to half the Confederacy's domestic cannon, gave him 250 tons of machinery, including 24 five-ton rollers to crush the niter into gunpowder. He obtained two more rollers from a plant in Macon, Georgia, and another two from Chattanooga, Tennessee. In various corners of the South, George found machinery made in the North before the war—a 130-horse-power engine, five boilers, a 14-ton flywheel, huge retorts, iron cylinders, iron evaporating pans—and hauled it all to Augusta. It was quite an accomplishment. Gorgas was pleased to report periodically to Confederate government officials that "George Rains and his men are still working miracles at Augusta."

Under Rains' direction, copper boilers were made from turpentine and whiskey stills he brought in from back-woods moonshiners. He brought raw copper from Tennessee, iron and coal from northern Alabama and North Carolina, and tin and zinc for roofing from Mobile. He did not stop until the plant was ready to make powder. It continued its operation until the end of the war, furnishing the Confederacy with gunpowder of the finest quality.

The Confederacy spent about \$385,000 for the plant, and both Rains and Gorgas boasted that it was one of the South's best investments. By the time the plant began operation on April 10, 1862, powder coming through the Union's blockade cost more than

\$3 per pound; the Augusta Powder Works made a million pounds a year at a significantly lower cost. According to George's calculations, the powder works saved the Confederacy almost \$2 million.

Rains pioneered clever new designs to increase the plant's productivity. He developed new ways to cool the powder and remove smoke and ashes from the factory. He also originated and perfected new methods of purifying and pulverizing raw sulfur. When a lack of willow threatened to slow charcoal production, he determined that cottonwood, abundant near Augusta, would work just as well.

Safety was always one of Rains' main concerns at the Augusta Powder Works. To minimize the danger, the 12 rolling mills featured walls as thick as 10 feet, and the buildings along the canal were separated by at least 1,000 yards to prevent any explosion from setting off a chain of blasts. Thirty-gallon water tanks lined the area above the boilers and were rigged to drench the powder the moment a fire started.

During its three years of operation, the Augusta works suffered only four explosions, two of which were minor incidents causing no injury. The first serious explosion was caused by workers who failed to remove a finished charge from the mill before beginning a new one. Suddenly, 120 pounds of gunpowder burst into flame, and the front and roof of the mill were blown off. Several workers suffered minor injuries, but the other 11 mills were undamaged. The most serious explosion occurred just outside a temporary granulating building while the foreman, known for his strictness in enforcing safety regulations, was absent. It shook the earth for some distance, blew up three tons of powder and shot flames and white smoke 500 feet into the air. Seven men, a boy, and two mules were killed in the blast. It is believed to have been caused by workmen smoking—a violation of one of Rains' strictest rules.

Explosions were only a secondary problem at the plant claimed Rains. Because the Confederate army kept drafting his workers away, his workforce was relatively unstable. In 1864 he wrote to Gorgas: "My principal agent attending to the transportation of wood for the Steam Engine and for the powder works has been taken from the works to do duty with a local company here, so that these works are liable to be stopped for want of wood on any day and as the supply for all the Arsenals depends on the powder daily made at the works, such interruptions are likely to be disastrous."

With Gorgas' support Rains managed to keep the plant operating every day until the end of the war. The Augusta Powder Works responded promptly to the Confederate calls for powder throughout the war; in one two-day period the plant produced 22,000 pounds of gunpowder to fill a rush order from Charleston. Rains also devised "safety powder boxes" to replace kegs for shipment, and after the war he claimed there had been no explosions during powder deliveries from Augusta.

The Augusta Powder Works had produced 2.75 million pounds of high-quality gunpowder by April 1865. More than 70,000 pounds was still on hand when Richmond fell that month. George was pleased after the war to learn that his captured gunpowder was being used for artillery practice at Fort Monroe, where Federal officials classified it as "very superior—the very best."

Rains closed his powder works on April 18, 1865. "Sadly I took down the last beloved flag and folded it away," he recalled. "The fires went out in the furnaces; the

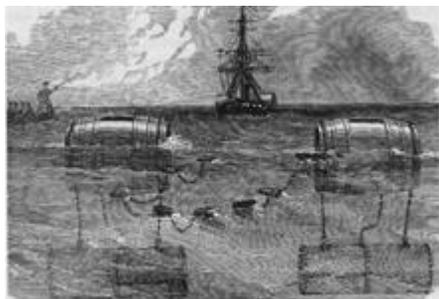
noise of the mills ceased; one by one the workmen slowly went away and once more I stood on the banks of the canal alone."

Rains remained in Augusta after the war. He was professor of chemistry and pharmacy at the Medical College of Georgia (later the University of Georgia) from 1867 to 1884, serving for a time as dean. The writer of *History of the Confederate States Powder Works*, George later went into business in New York in 1894 and died in Newburgh on March 21, 1898, at the age of 81. After the war; his brother; Gabriel, had found his way to Georgia too, living for a time in Atlanta before moving to Charleston. In South Carolina he served in the U.S. Army's Quartermaster Department from 1877 to 1880. He died in Aiken, South Carolina, on August 6, 1881, at the age of 78.

The Rains brothers had lived separately, worked separately, and died separately. But in the South and North alike, their explosive legacy was remembered. To history, they would always be the "Bomb Brothers."



George Rains (left), shown here years after the war, designed the Augusta powder works (right) with safety and efficiency in mind.



Federal soldiers from the steamer Resolute recover Confederate-placed torpedoes—buoyed by watertight oil barrels—from the Potomac River. Northern officers lobbied against the use of these and other explosives, which they called “infernal machines” and “sub-terra booby traps.”

Contact Information

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