

I was an engineer at Gettysburg



Railroads In the Civil War

My Civil War link to railroads

My great, great grandfather, John Larrabee, 1st Sgt 155th Illinois, was assigned to guard bridges at Bell Buckle, TN.

He was guarding the Nashville and Chattanooga Railway as the railroad crosses the Bell Buckle Creek both north and south of the town.

His Regiment was divided into groups of 20 to 30 men occupying block houses. He would have been centrally located in one of the larger units as he was 1st Sergeant.



Disclaimer: I have not checked this personally, old family story

Railroads In the Civil War

On January 31, 1862, Congress expressly approved President Lincoln's power to "take possession of the Railroad and Telegraph Lines" in the interests of "public safety".

In doing so, this act authorized the President to take possession of and hold any public or private railroads.

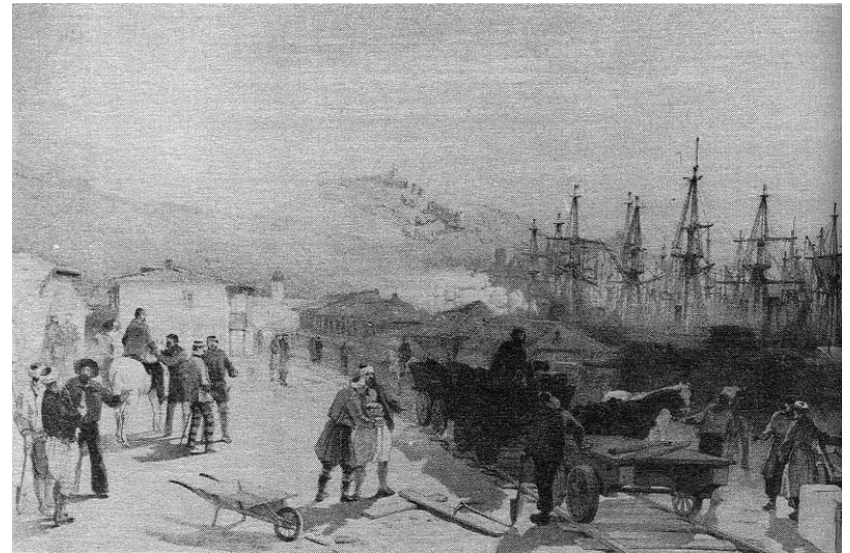
It also allowed the President to take possession of the companies' stock, personnel or real property, for the limited purpose of transportation of troops, munitions, equipment, military property, and stores anywhere throughout the United States.

This Act is the precursor to the WW I USRA takeover of railroads.

Railroads In the Civil War

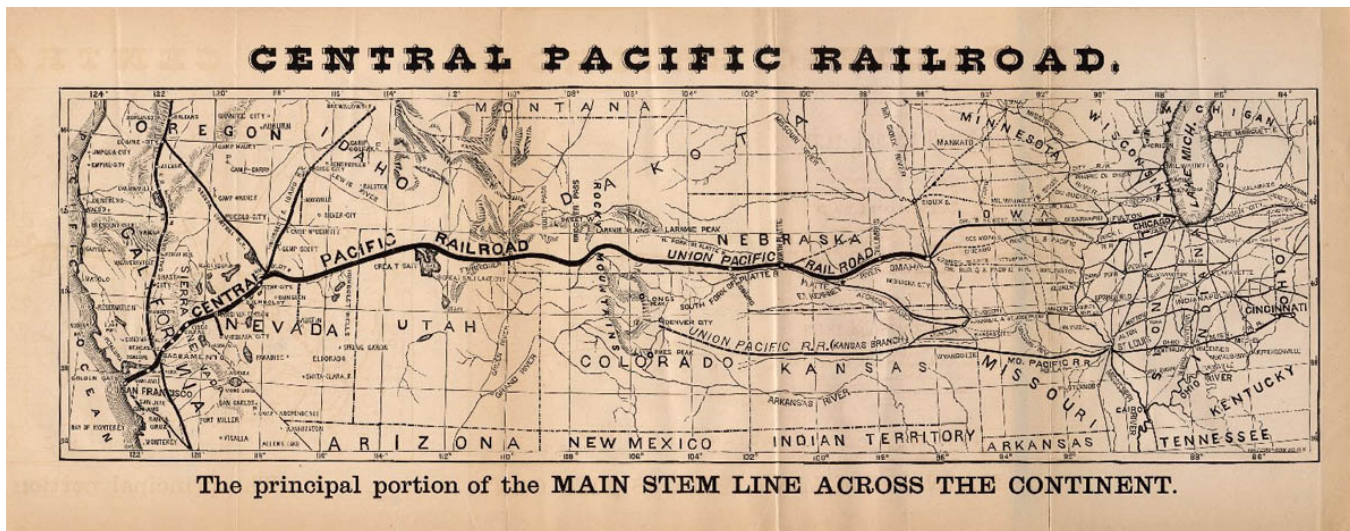
This was not the first use of railroads in war

The Grand Crimean Central Railway was a military railway built in 1855 during the Crimean War by Great Britain. It was used supply to Allied soldiers engaged in the siege of Sevastopol who were stationed on a plateau between Balaklava and Sevastopol. It also carried the world's first hospital train.



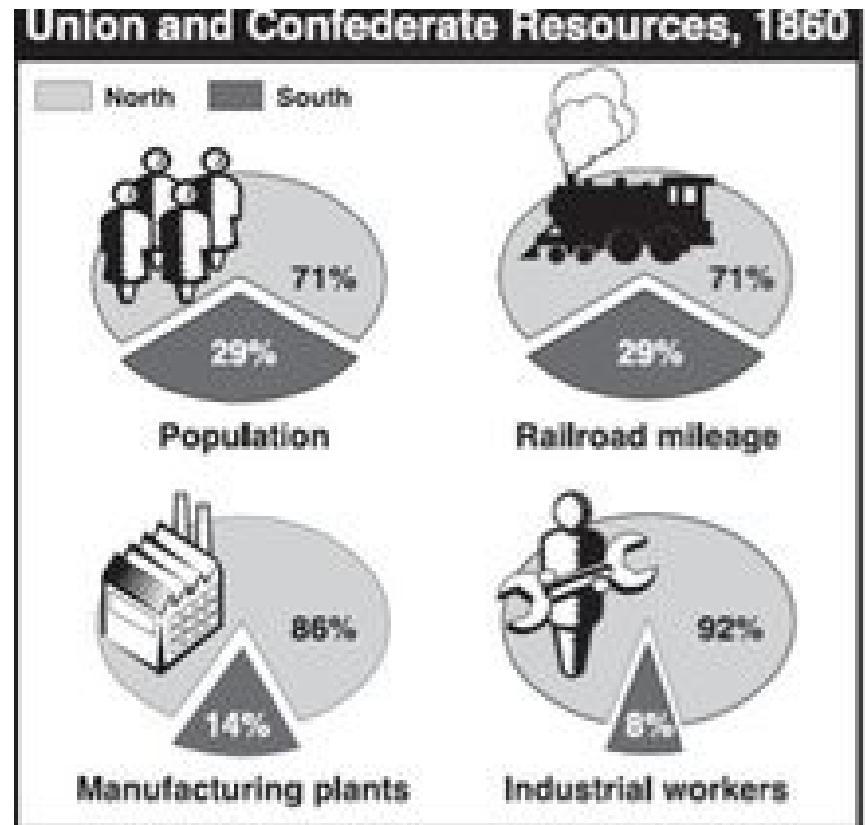
Railroads In the Civil War

While not specifically related to the Civil War, five separate routes were surveyed from what is now the Midwest to the Pacific, two southern, one middle and one northern route. When the Southern states seceded, that removed any opposition to the Central Route. Lincoln signed the Pacific Railroad Act in 1861.



Railroads In the Civil War

- **Manufacturers**
 - Locomotives
 - builders:
 - North = 12
 - South = 2
 - Rail rolling mills
 - North = 8
 - South = 2
- No new locomotives were built in the South after the start of the war while over 400 were built in the North.

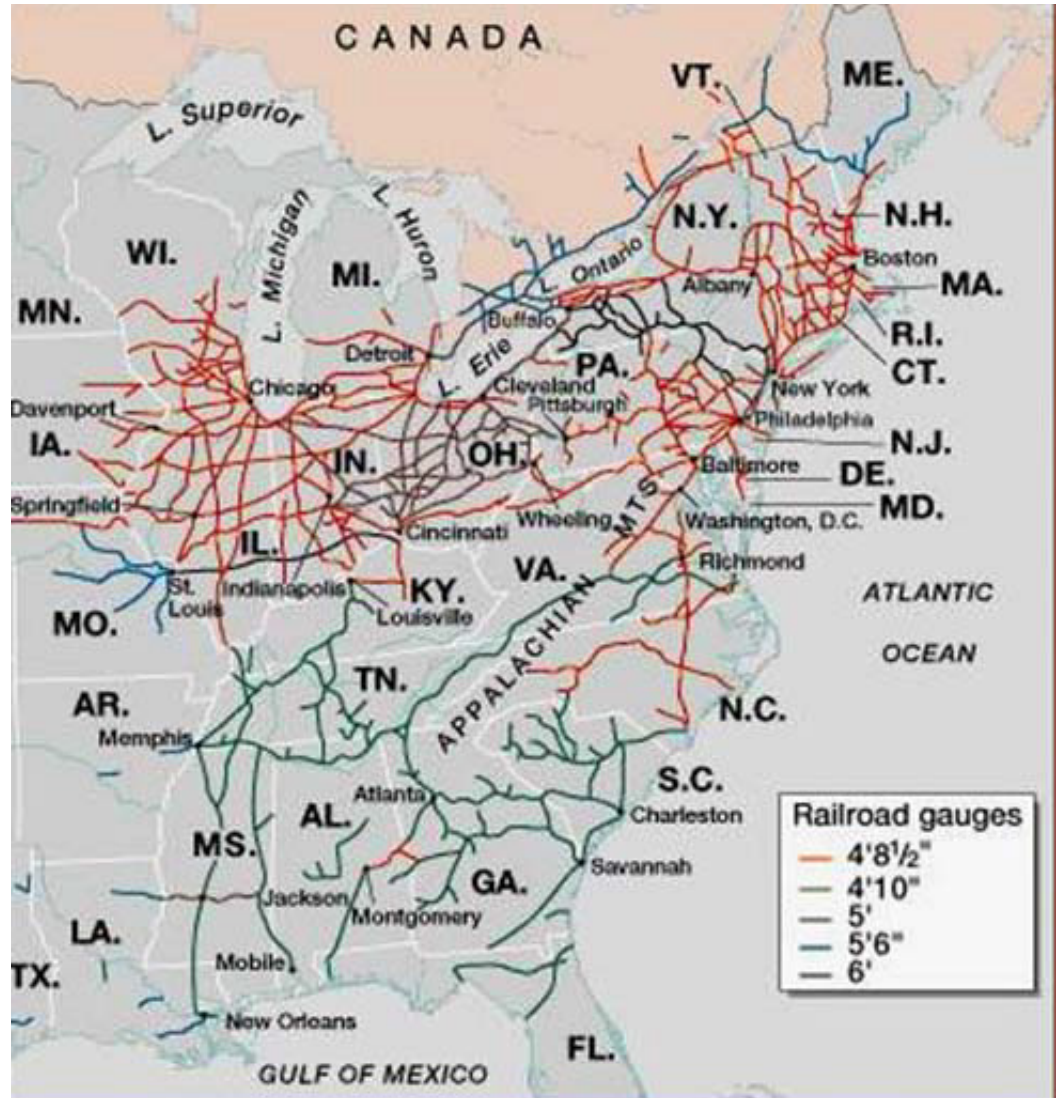


Source: *Encyclopedia Americana* (adapted)

Railroads In the Civil War

Railroads as 1860. Note differences of gauges.

North had at least 10 gauges, South mostly 5' but not connected.



Railroads In the Civil War

Gauge was an issue and was done purposefully as the transfer of passengers and freight created business. Local railroads did not want their cars going off line.

The coach taking Lincoln to DC for his inauguration had to be hauled over streetcar tracks between President Street Station and Camden Station.

While 6 railroads served Richmond, none had a connection with any of the others.

The North had more gauges than the South which were mostly 5' gauge.

Railroads In the Civil War

Northern Railroads

- 1860 Union Track mileage
21,300
- 1860 Confederate Track Mileage
9,022, more than England at the
same time
- Gauges from 4' 8 1/2" to 6 feet
- Northern railroads more
interconnected
- Southern railroads often built to
bring goods to ports
- "T" rail 35# to 65# per yard, 39'
"sticks"
- Strap iron on wood stringers



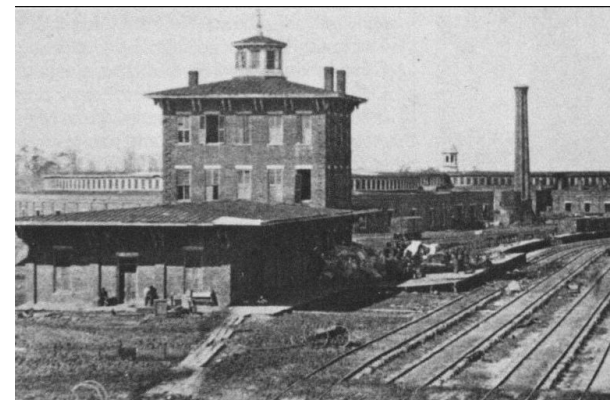
Railroads In the civil war

Southern Railroads

At the start of the war, the South had more miles of track than England

Loss of key rail junctions such as Corinth, Vicksburg and Atlanta as example, severed the through network necessary to move troops and supplies quickly and efficiently.

In spite of significant hardships and handicaps, the Southern railways performed very well until the very end of the war.



Railroads In the civil war

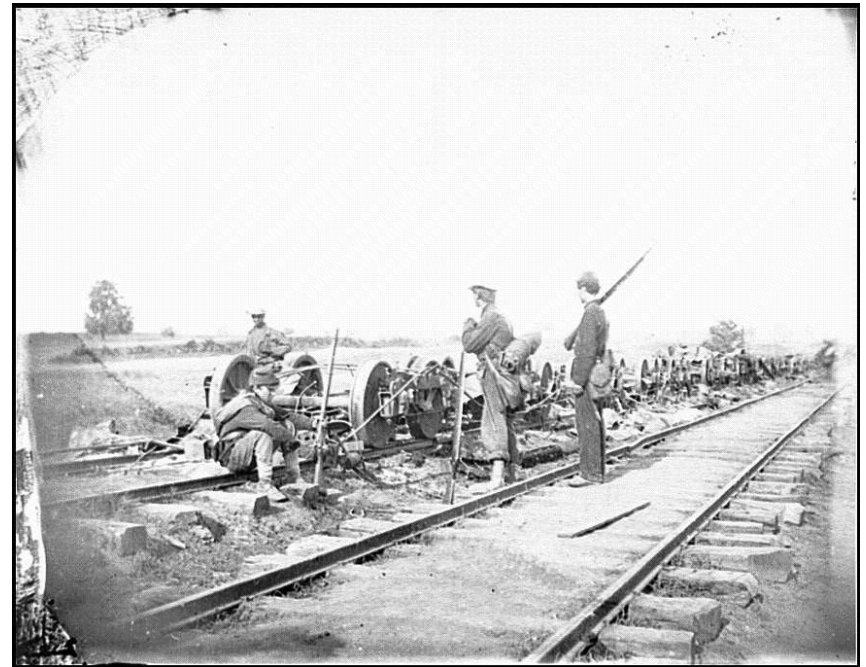
Southern Railroads

A significant factor was that there were too many gaps in what should have been continuous lines.

Southern Railroad managers too often acted in their own best interests and not that of the South.

The Confederate government lacked the will to impose a coordinated transportation program as did the North (States Rights).

Gauge differences were an issue.



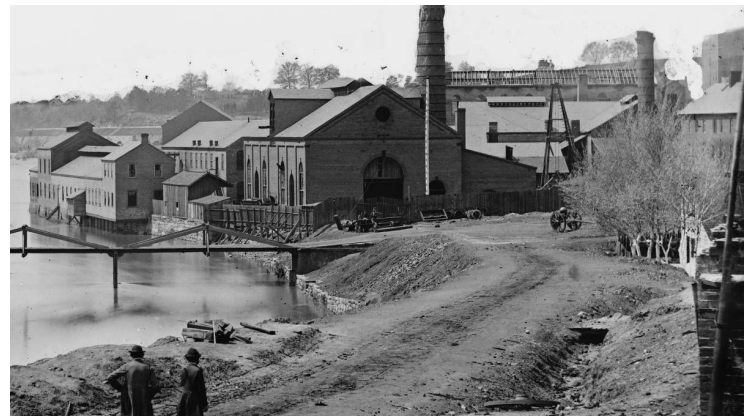
Railroads In the civil war

Southern Railroads

The Southern railroad suffered from lack of maintenance and inability to construct any replacement equipment. Some lines had their rails taken for use on Southern ironclads.

Even though Tredegar Iron Works built locomotives prior to the war, none were constructed in the South after 1861

The South never established the same type of railroad control and operation as did the North.



Railroads In the Civil War

While most Northern railroads did not experience war damage some such as the Baltimore & Ohio, were in the middle of the fighting. Their main line was south of the Mason Dixon line.

The B&O possessed 236 locomotives, 128 passenger coaches, 3,451 freight cars and 513 miles of railroad, all in states south of the Mason–Dixon line.

The B&O was critical to the Federal government during the Civil War, as it was the main rail connection between Washington, D.C., and the northern states. As a result, 143 raids and battles during the war involved the B&O Railroad, many resulting in substantial loss.



Railroads In the Civil War

Train crews on both sides
crews were under constant
threat of being shot by
soldiers, partisans and gorillas.



The crew were unarmed and
defenseless in their locomotive
cabs. Train wrecks also took
their toll of train crews.



Railroads In the Civil War

- Locomotives:
 - Mostly 4-4-0s with some larger type such B&O 0-8-0s used to haul coal.
Average cost \$10,000.
 - Weighed between 20 and 30 tons, burned wood and some were very ornate; brass and bright paint.
 - Could haul about 10 freight cars each weighing about 10 tons.
 - Hand brake on tender, none on engine



- One of locomotives of the Lincoln Funeral Train. Model by John Bell



Railroads In the Civil War

Passenger cars

The cars had rounded roofs, roof vents, end-platforms and skirting to try to keep dust off passengers brought through open windows.

The cars were typically 41' long and 10' high with a weight of 10-tons and a seating capacity of 50.
Â Later in the 1860s, a passenger car averaged 52' long and 10' - 13' high with a weight of 18-tons and a seating capacity of 50.

The passenger coaches were difficult to heat because the stoves were located at each end of the coach. The stoves created a high risk of fire in the wooden coach.



Railroads In the Civil War

Freight cars

- Box, flat, stock and “tank” cars
- 10 ton capacity mostly wood but some iron cars to haul munitions.
- Hand brakes only



- Link and pin couplers



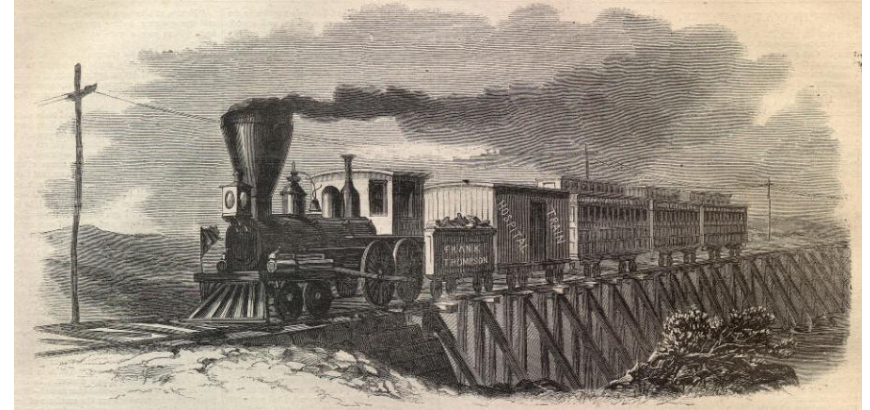
Railroads In the Civil War

Hospital cars

As casualties mounted, the Army sought a better way to move injured soldiers to area hospitals. Hospital cars were constructed from existing railroad passenger cars, with bunks replacing seats. |

Because of rough tracks and poor construction methods, the ride in included jolting and jostling, Later cars included rubber slings for stretchers to make the ride more comfortable.

The hospital cars operated as part of dedicated trains, complete with a boxcar to provide meals.



Railroads In the civil war

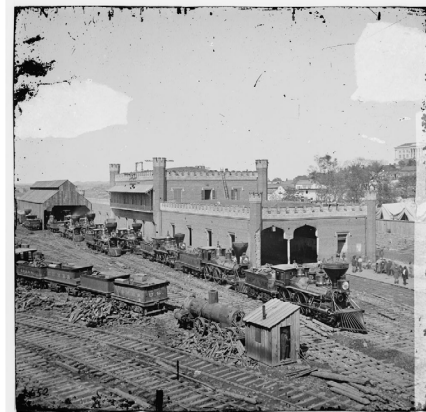
United States Military Railroad

The United States Military Railroads, organized in June 1862 by the War Department, ran the railroads captured in the areas in the South, using them to supply Union troops.

By the end of the war, the agency operated 2,105 miles of railroad, with a combined rolling stock of 419 engines and 6,330 cars, 642 miles of track, and 26 miles of bridges built or rebuilt, at a cost of nearly 30 million Civil War dollars.



Fairfax Station, Va.



Nashville Yard

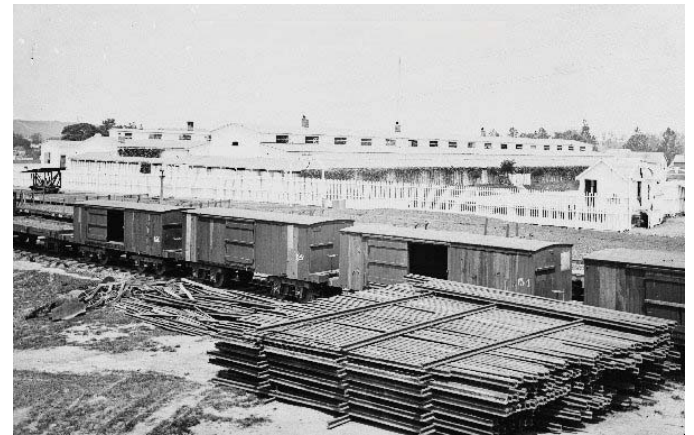
Railroads In the Civil War

United States Military Railroad

This photograph shows the USMR yard, roundhouse and storage facilities in Alexandria. This area is now an upscale townhouse complex and has a street named "Roundhouse" that is at the approximate location of the one shown in the picture.



This photograph shows the USMR storage facilities in Alexandria. Note the stack of rail ready to be taken to any location as needed. The boxcars may be specially built for ammunition transport.



Railroads In the Civil War

Trains as Offensive Weapons

Railroad monitors used thick, sloped iron casemates that could deflect light artillery. monitors resembled elongated pyramids and were the same shape as casemated ironclad vessels.



The Dictator, weighing in at 17,120 lbs. was used during the Siege of Petersburg. The mortar was placed on the car using a side track constructed especially for the Dictator.

It fired a shell weighing 218 lbs., using 20 lbs. of powder, traveling least 2.7, miles and could shatter most field magazines and bomb-proofs.

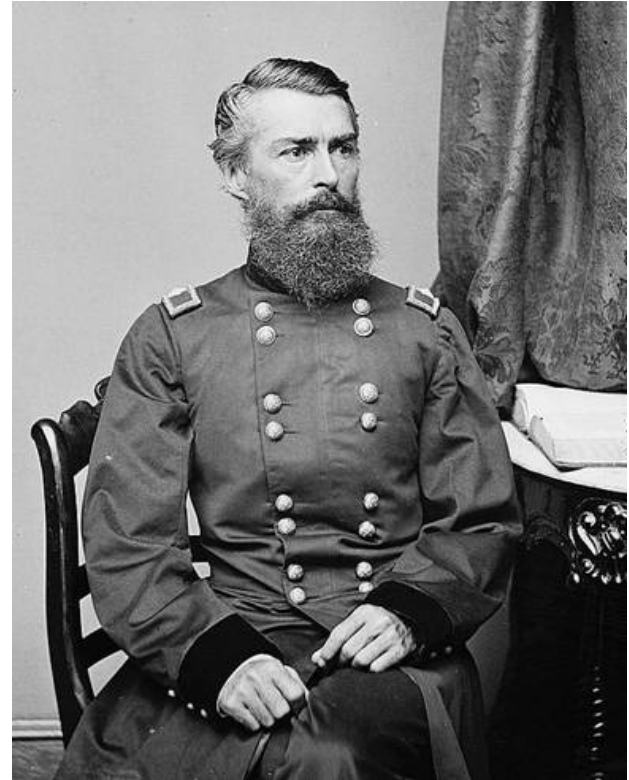


Railroads In the Civil War

Herman Haupt

Herman Haupt was an civil and railroad construction engineer. He played a key role in the War, during which he revolutionized Northern military transportation, particularly the use of railroads.

He was relieved of duty September 14, 1863 and Daniel McCollum assumed his duties.

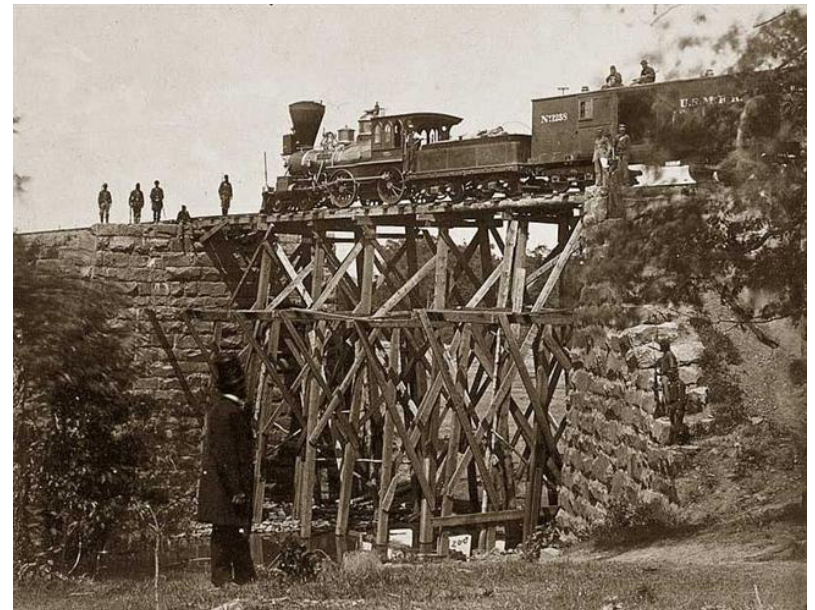


Railroads In the Civil War

Designed 60' bridge trusses which could be prefabricated in advance

Developed method to rebuild bridges quickly, his Construction Corp. built five bridges of varying lengths in one day

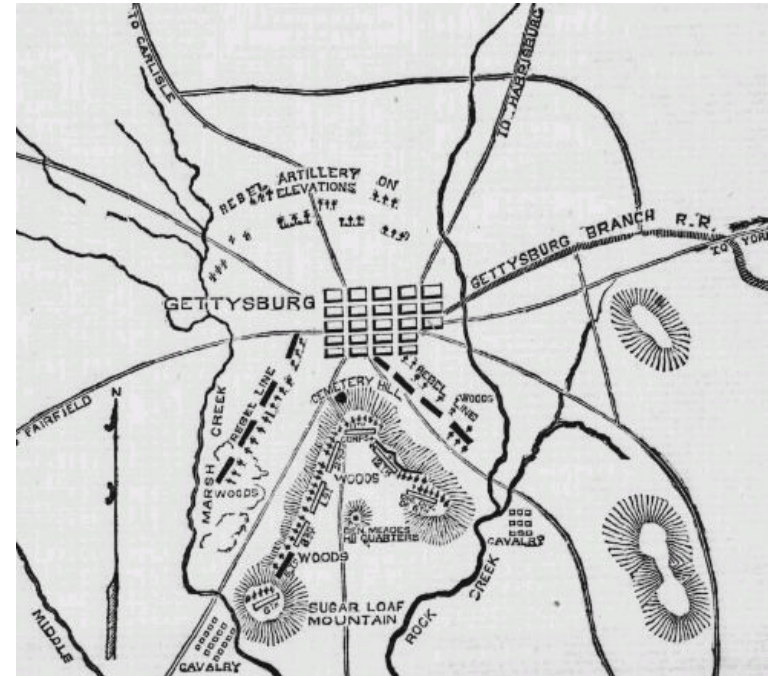
Haupt was put in charge of all railroads in the Battle of Second Manassas and asked to issue whatever orders were necessary to correct the situation after supply lines broke down.



Railroads In the Civil War

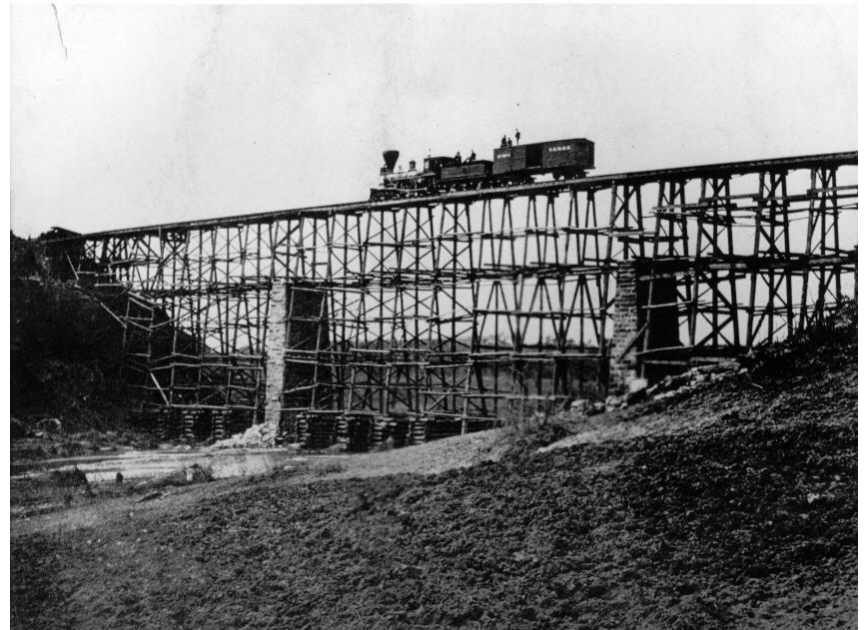
Haupt was instrumental in supplying Union forces at Gettysburg:

- Single track railroad, no passing sidings, no turntable
- Haupt fleeted trains, five at time.
- Cars were unloaded immediately
- Retuning train took wounded to Baltimore Hospitals
- By July 3, 1,500 tons a day were being delivered
- Haupt urged that Mead move after Lee.



Railroads In the Civil War

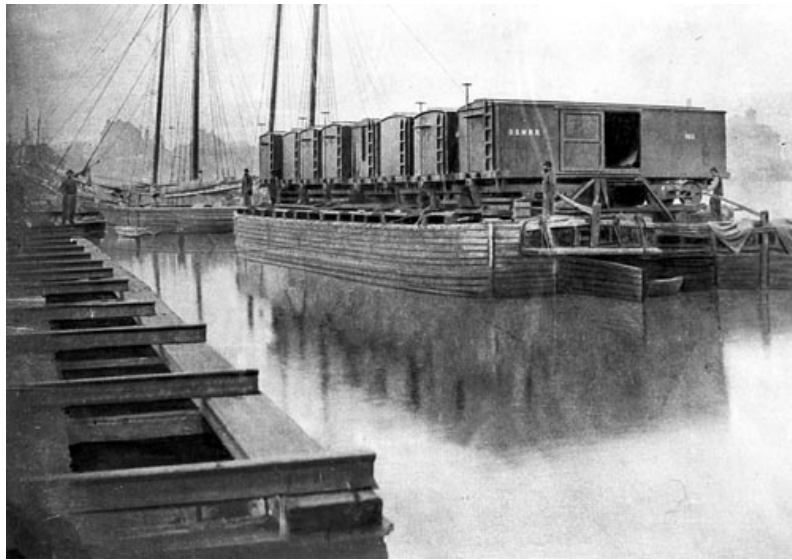
President Abraham Lincoln in a visit on May 28, 1862, observed "That man Haupt has built a bridge five hundred feet long and one hundred feet high, across the Potomac Creek, on which loaded trains are passing every hour, and "Upon my word, gentlemen, there is nothing in it but cornstalks and beanpoles".



Railroads In the Civil War

Boxcars move by water

Freight cars were loaded on barges at Alexandria. Each barge could carry 8 cars and were floated carried to Aquia Creek with the trip taking about 12 hours. At Aquia Creek, the cars are hauled to Falmouth where the Army of the Potomac was supplied without cargo transfer.



Railroads In the Civil War

Daniel McCallum

Daniel McCallum was appointed Military Director and Superintendent of the Union railroads with the staff rank of Colonel. He is credited much of the efficiency of the railroad service during the Civil War.

He received a brevet promotion to Brigadier-General of Volunteers for faithful and meritorious services on September 24, 1864, and his authority was extended to the Western Theater and to support Sherman's Atlanta Campaign.

He received another promotion to Major General in 1865. In July 1866 McCallum was mustered out of the service and published a report on the military railroads during the war.



McCallum liked field work and is shown overseeing repairs.

Railroads In the Civil War

As superintendent of the U.S. Military Railroads, McCallum was the liaison officer between the government, the railroads and equipment manufacturers.

His greatest success was supporting the western operations from Nashville and Chattanooga in 1864 by successfully supplying General Sherman's army.

The successful supply of Sherman's army in its campaign from Chattanooga to Atlanta was acknowledged by Sherman in his reports.



Railroads In the Civil War

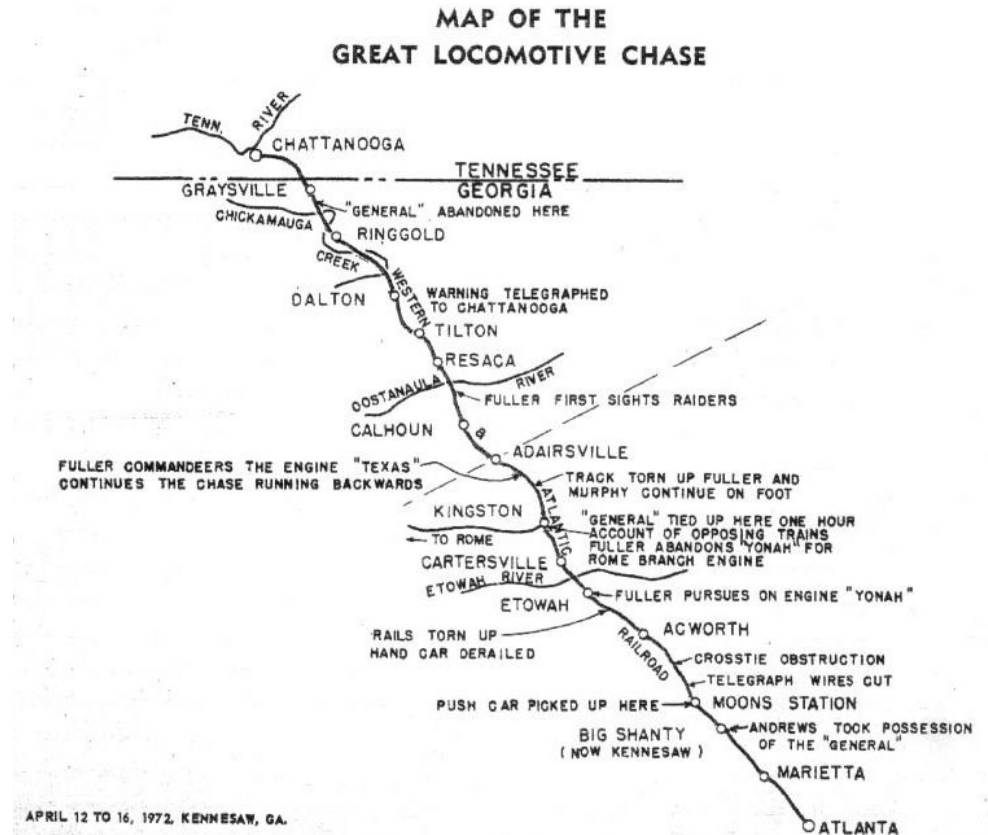
The Great Locomotive Chase



Both the General and the Texas are preserved.

James Andrews created a bold but flawed plan and William Fuller just wouldn't quit, finally getting his train back.

Disney's movie equipment came from the B&O Museum and was authentic as was the railroad used, a north Georgia short line.



Railroads In the civil war

1st Bull Run or 1st Manassas

General Robert Patterson was to prevent the Army of General Joseph Johnson, located at Winchester, from joining General Beauregard at Bull Run.

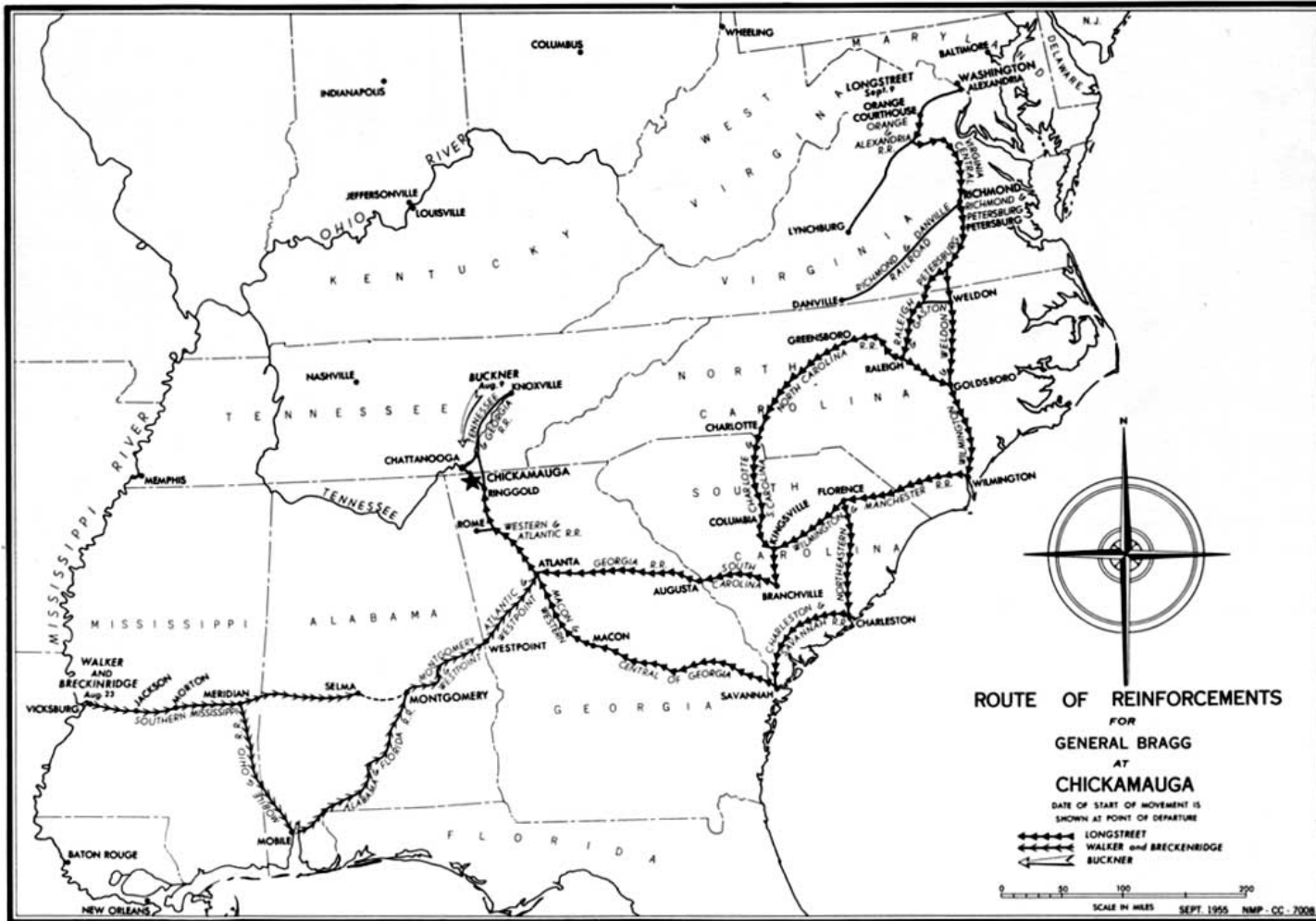
However, Johnson was able to march to Piedmont Station, now known as Delaplane, where trains were waiting to carry his soldiers to battle.

The arrival of these fresh soldiers late in the battle is considered to be the stroke that broke the Union line, allowing the Confederates to win the battle.



Railroads In the Civil War

Confederate reinforcements to Chickamauga



Railroads In the Civil War

Confederate reinforcements to Chickamauga

General Rosecrans' Army of the Cumberland was beginning to threaten General Bragg so he needed reinforcements.

General Longstreet calculated that two days would be ample time to complete the movement of reinforcements by rail, provided the Confederacy maintained control of the railroad from Gordonsville, Virginia to Chattanooga via Bristol, Tennessee happened.

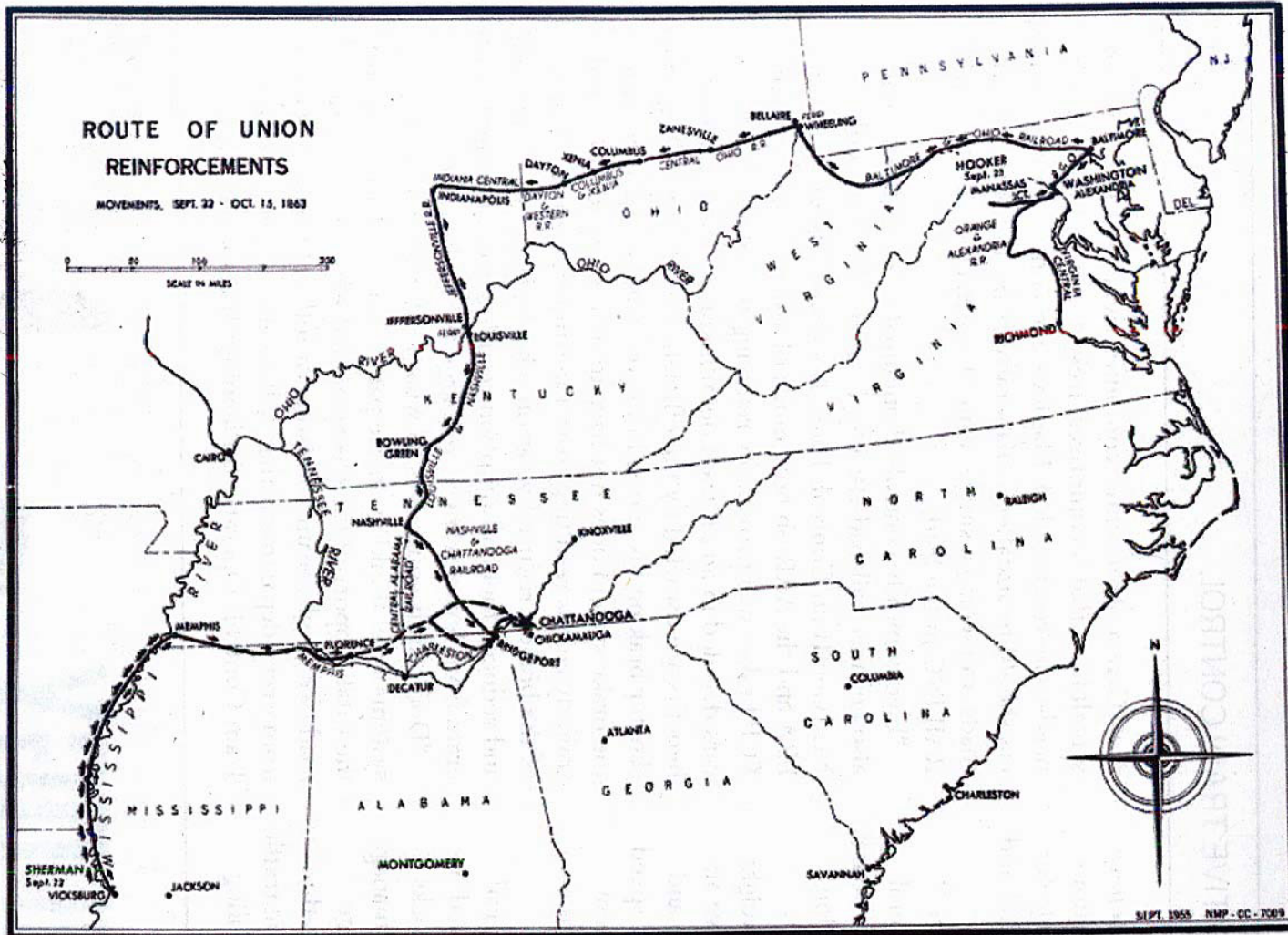
General Burnside occupied Knoxville on September 3 and General Bragg was maneuvered out of Chattanooga by General Rosecrans. This closed the direct line to General Bragg and required the transfer of troops over a more circuitous route through the Carolinas.

Troops were loaded south of Fredericksburg to begin their journey to reinforce Bragg. Hood's division was first, followed by McLaws' division then Alexander's artillery battalion.

Longstreet's veterans began arriving at Catoosa Station in north Georgia late on September 18, troops moving to the front as they arrived. On the second day of the battle of Chickamauga, Virginia veterans broke through the Union lines, ensuring a victory for the Confederacy.

Railroads In the Civil War

Union Reinforcements for Chattanooga



Railroads In the Civil War

Union Reinforcements for Chattanooga

The movement of the Union Army of the Potomac's 11th and 12th Corps under Generals O. O. Howard and Henry Slocum, from northern Virginia to near Chattanooga was one of the outstanding achievements of the U.S. Military Railroad.

On September 24, 1863, Secretary Stanton decided to initiate the troop movement to reinforce Chattanooga by rail and put Gen. Joseph Hooker in command of the two corps. He invoked the 1862 law that allowed the President to take control of the railroads in the event of a military emergency.

Stanton put McCallum in charge of planning, and with help from 6 railroads, including the Baltimore & Ohio Railroad and the Pennsylvania Railroads, within 14 days, 23,000 men and their equipment departed for the 12-day, 200 mile railroad and steamboat trip. The troops traveled light, but with full ammunition cartridge boxes.

Railroads In the Civil War

City Point

During the siege of Petersburg, General Grant's headquarters was at City Point, Virginia. USMR workers constructed 21 miles of rail lines by March 1865, linking City Point to the Union front lines around Petersburg.

City Point supplied more than 100,000 troops and 65,000 animals.

Barges from Washington carried 25 locomotives and 275 freight cars for use at City Point.



Railroads In the Civil War

City Point

In just 22 days, the army had completed the first stage of the railroad and had trains operating on a full schedule.

At its peak, there were 18 trains a day in operation. While there were no formal stations, there was supply depots at virtually every Union position along the line.

A small portion of the line to City Point still exists, serving local industries

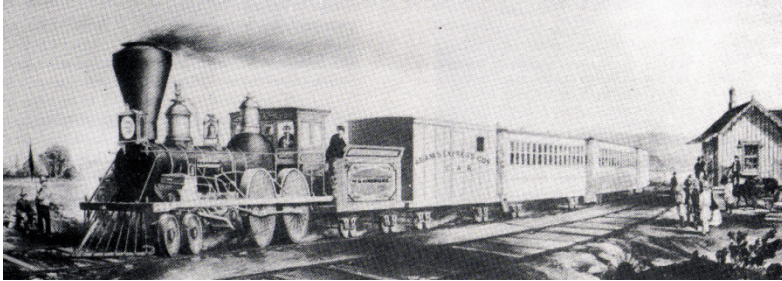


Railroads In the Civil War

The Southside Railroad was last railroad that Grant severed as part of the Petersburg siege. Lee then realized he could not hold Petersburg.



RAILROADS IN THE CIVIL WAR



After receiving word from General Lee that Petersburg was lost, Jefferson Davis and others boarded the train and began a trip heading to Danville.

This was the one of the last, if not the last, train to leave Richmond. They traveled on Richmond and Danville Railroad, one of the most important lines in the South.

Union forces had cut the rail line south to Charlotte, forcing the Davis group to proceed on horseback.

RAILROADS IN THE CIVIL WAR



Farmville, a station on the South Side Railroad, was the object of the Confederate Army's desperate attempt to get rations. Lee had ordered food to be sent by rail from Lynchburg to Farmville. This was also the site of the battles of the High Bridge with both sides fighting for possession of the bridge in two separate battles.

On April 7, the remaining portion of Lee's army reached Farmville and the food in the waiting boxcars. The Union attacked Lee's soldiers who were able to hold Union soldiers until dark, then began marching west again, toward Appomattox Courthouse.

Railroads In the Civil War



The Battle of Appomattox Station occurred on the day before General Lee surrendered the Army of Northern Virginia to Lieutenant General Grant, effectively ending the Civil War. on the afternoon of April 8, 1865, Union cavalymen under Gen. Custer dealt the Army of Northern Virginia a final blow. First, they captured trains loaded with supplies for Confederates, then captured General Walker's wagons and artillery.

On reaching Amelia Court House during the morning of April 4, 1865, Lee searched the commissary stores, finding abundant ordnance but no food. Lee waited 24 hours in vain there for R&D trains to arrive with badly needed supplies. Union cavalry, meanwhile, sped forward and cut the Richmond & Danville at Jetersville. Lee had to abandon the railroad,

Railroads In the Civil War

The “last Train” of the Civil War

On April 21, 1865, a train carrying the coffin of President Abraham Lincoln left Washington, D.C. on its way to Springfield, Illinois, where he was buried on May 4.

The train carrying Lincoln’s body traveled through 180 cities in seven states on its way to Springfield.

Newspapers published a schedule of the stops for the special funeral train.

A replica of the Funeral Car has been built. Details at <http://www.thosetrainpeople.com>



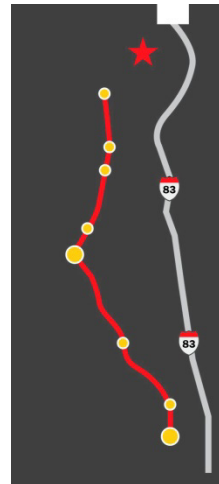
Railroads In the Civil War

The Northern Central, a Civil War Era tourist train

The Northern Central Railway is a recreation of a portion of the railroad which once operated between York, PA and Baltimore, MD. The top left picture shows the recreated famous Civil War station of Hanover Junction.



The NC Ry operates between Hyde and New Freedom, PA. offering various events and rides, traveling along the very same route which saw significant action by both sides during the War.



Railroads In the Civil War

Railroads played a significant role in the War from First Bull Run to Appomattox Station.

For additional information on railroads in the Civil War, the Civil War Trust has an excellent four-minute video that's reinforces many of the points about which we discussed. (<https://www.battlefields.org/learn/videos/railroads-civil-war>)

If you wish to do further research on this topic, I have prepared a bibliography which includes the sources which I used.