



The Bloodiest War

Understanding the Civil War

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Weapons

- In the 1840's and 1850's the rifle musket was developed. (Rifling is a set of spiral grooves inside the musket barrel that impart spin to the bullet.)
- Adding rifling to a smooth bore musket and using the minie ball developed by French Capt. Minie' produced a long range accurate weapon.
- Single shot muzzle-loading; Firing rate 2 -3 rounds per minute; equipped with a bayonet; \$14 – \$20.
- Fired .58 in, 500 grain (1.14 oz) bullet 950 ft/sec.
- The rifle musket was accurate for 200-300 yards and could kill at 1000 yards.

Available Weapons

- At the beginning of the war both sides were desperate for modern weapons to equip armies.
- Both sent agents to Europe to buy large quantities of weapons.
- The South used what they could get.
- The North manufactured over million Springfield model 1861 rifle muskets and contract variants.
- The Union favored the Springfield Model 1861.
- The Confederacy the British Pattern 1853 Enfield.

Popular Weapons

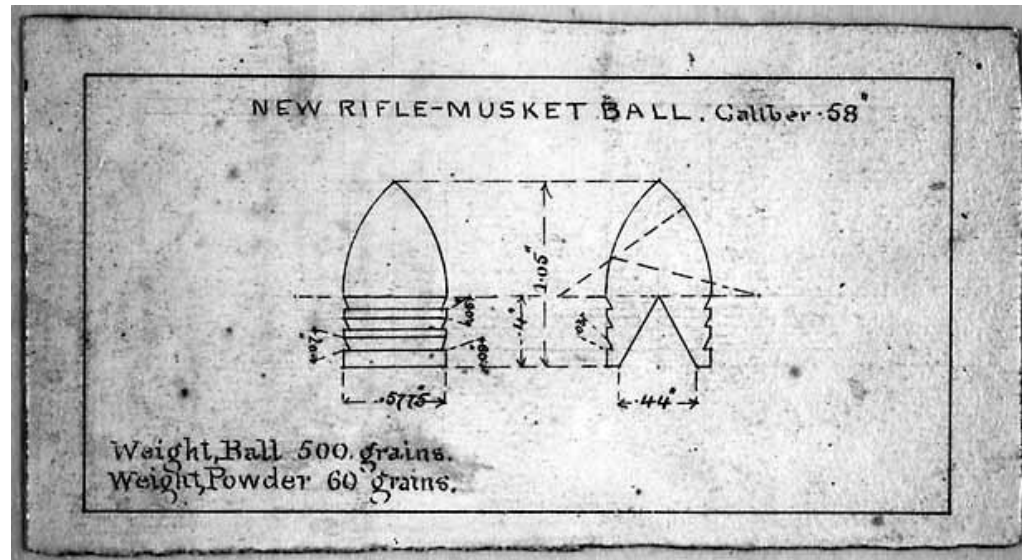


Springfield Model 1861



Pattern 1853 Enfield

Minie Ball



Minie Ball Wounds

- The minie ball created fearful wounds.
- It was a large bullet with lots of momentum.
- If the ball struck bone, it shattered.
- Surgeons learned the only way to save the life of the wounded was to amputate as soon as possible.



Field Artillery

- Artillery also benefited from rifling for long range accurate targeting.
- However smooth bore artillery was superior for many close range targets.
- Ammunition included round solid shot, bolt, shell, canister, and grape shot.
- The Union with its manufacturing capability had the best artillery.
- The Confederate artillery was mostly captured from the Union.

Artillery Types

Weapons

The principal guns widely used in the field are listed in the following table.

Field artillery weapons characteristics^[1]

From Wikipedia

Name	Tube				Projectile (lb)	Charge (lb)	Velocity (ft/s)	Range (yd at 5°)
	Material	Bore (in)	Len (in)	Wt (lb)				
6-pounder Gun	bronze	3.67	60	884	6.1	1.25	1,439	1,523
M1857 12-pounder "Napoleon"	bronze	4.62	66	1,227	12.3	2.50	1,440	1,619
12-pounder Howitzer	bronze	4.62	53	788	8.9	1.00	1,054	1,072
12-pounder Mountain Howitzer ^[2]	bronze	4.62	33 ^[3]	220	8.9	0.5	---	1,005
24-pounder Howitzer	bronze	5.82	64	1,318	18.4	2.00	1,060	1,322
10-pounder Parrott rifle	iron	2.9 or 3.0	74	890	9.5	1.00	1,230	1,850
3-inch Ordnance Rifle	wrought iron	3.0	69	820	9.5	1.00	1,215	1,830
14-pounder James Rifle ^[4]	bronze	3.80	60	875	14.0	1.25	----	1530
20-pounder Parrott rifle	iron	3.67	84	1750	20.0	2.00	1,250	1,900
12-pounder Whitworth breechloading rifle	iron	2.75	104	1092	12.0	1.75	1,500	2,800
<i>Italics denotes data for shell, not shot.</i>								

There were two general types of artillery weapons used during the Civil War: [smoothbores](#) and [rifles](#). Smoothbores included [howitzers](#) and [guns](#).

Artillery Examples



3 inch Ordnance Rifle



20 lb Parrot Rifle

Field Artillery Support

- Each gun required a six horse team and limber to move it and another six horse team and limber to move a caisson carrying ammunition.
- Forage was needed to feed the horses and they required a great amount of care.
- A battery in the North was six guns; in the South four.
- The average life of a horse in the artillery was under eight months.
- A constant resupply of horses was required.

Limber and Caisson



Tactics

- The tactics officers were trained in were based on the smooth bore musket.
- It had an effective range of 50 yards.
- In attack two rows of soldiers would advance within 50 yards of the defenders, loose a few volleys, and then charge with bayonets.
- The musket was as much a spear as a gun.
- Rifling extended the effective range to over 200 yards.

Tactics (Cont.)

- The attacker now had to absorb several volleys to get to the defenders.
- Insufficient attackers survived to mount a bayonet charge.
- A defender protected by fortifications suffered few losses.
- Rifling gave the defense an immense advantage.
- Mounting a frontal attack on a fortified position was suicidal.

North vs. South

- In order to restore the Union the North had to win battles and capture Confederate territory.
- This meant the North had to attack and take the losses attacks generated.
- To survive, the South only had to not lose.
- They could fortify and easily repel attacks **if they had enough defenders.**
- Both sides concentrated on defending their capitols.
- What was left went to operations in the West.

Resources North vs. South

Population

From 1860 Census

	States	Free	Slave	Total
Confederate	11	5,581,649	3,520,116	9,101,765
North & DC	18	18,596,499	3,181	18,599,680
Border	4	2,698,841	429,441	3,128,282
Territories & CA	1	600,101	63	600,164
Total		27,477,090	3,952,801	31,429,891

Industry

Union – 110,274 Establishments Confederacy – 18,026 Establishments

Army Strength

Quoted on Jan. 1

	1862	1863	1864	1865
Union	527,204	698,802	611,250	620,924
Confederacy	258,680	277,970	194,764	160,198

Finding Commanders

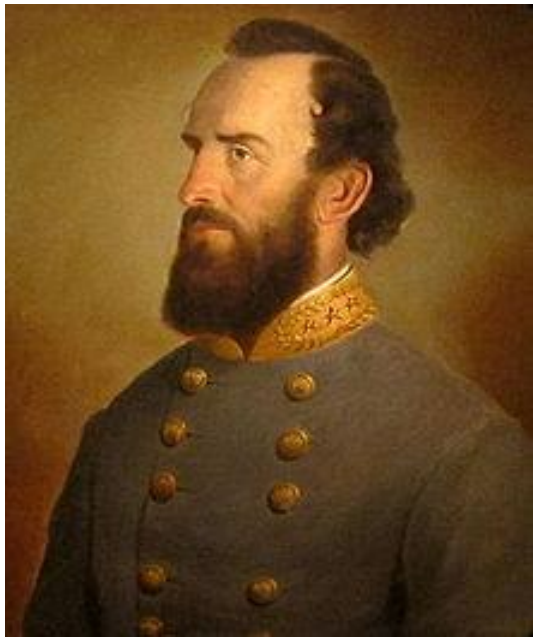
- By nearly every measure the Union had an overwhelming superiority over the Confederacy.
- Yet the Civil War went on for four long years.
- How was this possible?
- The answer is the top Commanders.
- Nearly all of them, North and South, went to West Point.
- The average West Pointer could see his own problems much clearer than his opponent's difficulties.

Finding Commanders(Cont.)

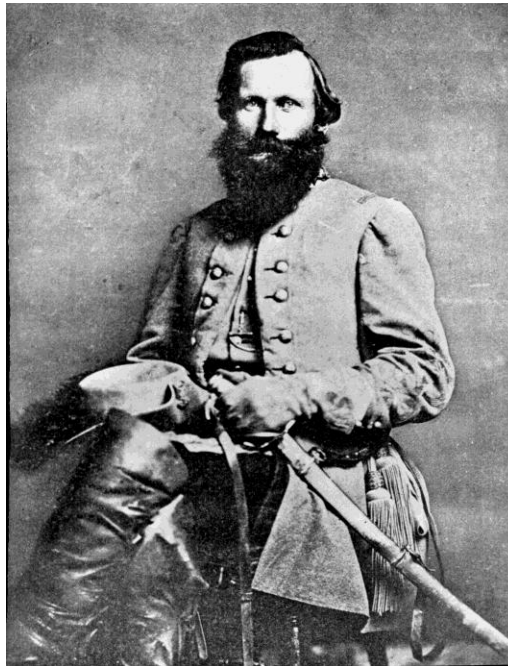
- He was more concerned about what the enemy could do to him than what he could do to the enemy.
- Most overestimated the strength of the enemy.
- The result was an extremely cautious Commander.
- Only a few West Pointers broke the mould and were aggressive Commanders.
- Jefferson Davis, a West Pointer, found his generals early and they dominated the Civil War in the east.
- They took big chances because they had to and won.

Confederate Commanders

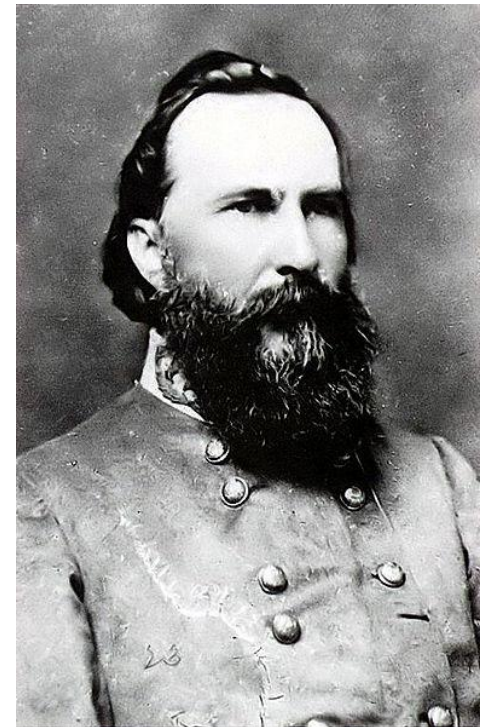
- Generals Robert E. Lee, Thomas J. (Stonewall) Jackson, J. E. B. Stuart, and James Longstreet are legends of the Civil War.



Stonewall Jackson



J. E. B. Stuart



James Longstreet

Lincoln's Commanders

- President Lincoln was not so lucky.
- At the end of 1861 he had three top Generals that were excellent administrators and on paper looked like winners.
- George McClellan in the east, Henry Halleck in the West, and Don Carlos Buell in the middle.
- They prepared armies but found numerous excuses why they couldn't use them.
- Finally an obscure Brigadier serving under Halleck named Ulysses Grant was given a chance to attack Fort Henry on the Tennessee river.

Lincoln's Commanders (Cont.)

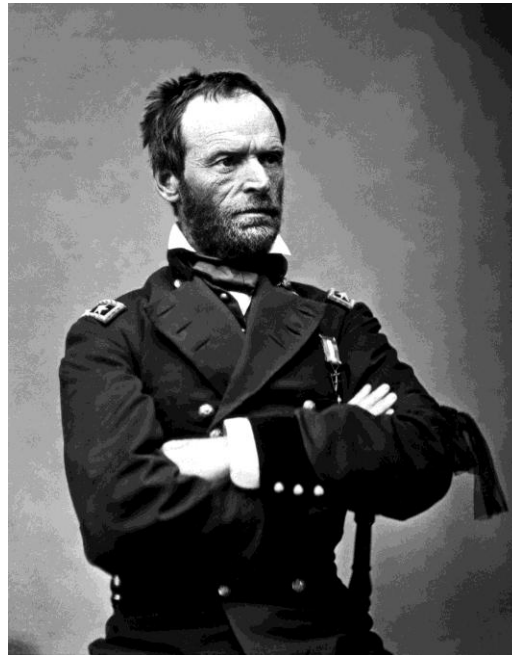
- Grant then moved quickly to invest Ft. Donelson on the Cumberland river 12 miles away.
- He captured an army of 14,000 men which forced the Confederates to abandon their defensive line in Kentucky.
- Over the next two years Grant developed as a Commander winning the battles of Shiloh, Vicksburg (30,000 captured), and Chattanooga.
- Generals William Sherman, and Sheridan developed their skills serving under him.

Lincoln's Commanders (Cont.)

- Finally in March of 1864 Lincoln had commanders who would apply the full strength of the Union and win the Civil War.



Ulysses S. Grant



William T. Sherman



Phillip H. Sheridan

Civil War Casualties

- Rifling of muskets and field guns gave the defense an advantage that it wouldn't lose until WW2.
- In the Civil War the Union had to attack if it was to win and restore the Union.
- The result was a high casualty rate.

From Wikipedia

War or Conflict	Date	Total US Deaths			Wounded	Total Dead & Wounded
		Combat	Other	Total		
Civil War: total	1861–1865	214,938	400K-500K	~625,000		
Union		140,414	224,097	364,511	281,881	646,392
Confederate		74,524	~225,000	~312,000		

Disease

- Nearly two-thirds of the deaths in the Civil War were caused by disease.
- Gathering large numbers of men in a small area has always been an invitation to epidemics.
- Add to that inadequate shelter, sanitation, personal hygiene, medical services, and unhealthy food.
- In camps of both armies sickness was ever-present.
- The Union cleaned up their camps in early 1863.
- With less resources the Confederacy had to make do.

The Final Accounting

- About 620,000 men out of a population of 31 million died in the Civil War.
- This is more deaths than all other US wars through the Korean War.
- In the North roughly 1 in 9 men of military age died.
- In the South roughly 1 in 4 white males of military age died.
- The South accepted the fact of their defeat and put all of their energy into recovery.