Civil War: Technology, Weapons, And Medicine

The American Civil War can be described as one of the most vicious and fatal wars in American history. 2,750,000 soldiers fought, 620,000 died, 180,000 African-Americans gave battle, as well as 70% of 2.75 million being under the age of twenty-three with twenty-five being no older than ten, consisting of 10,500 battles, with two combatants fighting each other, lasting 1,457 days, leading to one army's victory. However, although those numbers were prodigious, imagine the numbers if the soldiers didn't receive proper treatment, or if they didn't use effective technology and the best weapons available, the population presumably would've decreased 1%. Due to several aspects, however, deaths were still unavoidable in war, but the use of technology, weapons, and medicine during the Civil War did help to give to the outcome of fewer deaths, which did also help to change the statistics we see today.

Before the Civil War had even begun, technology was already holding its share of problems, not because of the technology itself, but because of the people. Technology helped to make life easier before, after and during the Civil War, for example, the cotton gin. The cotton gin was made to simply speed up the separation of seeds from cotton, which eventually increased the demand for cotton. In turn, this infuriated the South, because to keep up with the machine, they had to obtain more workers. This accumulated the demand for slaves, which angered the North, who were opposed to slavery. Also, during the Civil War, the use of the telegram and railroad impacted communication and transportation. The railroad provided lots of support in progressing the war and helping the civilians at home as well. Through this way of transportation, soldiers were able to get their goods and equipment faster and efficiently, and not only goods but information as well, such as military intel and locations. The telegram was invented thirty years before the Civil War had even begun, as a way to spread information quickly rather than having to wait days for information to be delivered, but it didn't become as popular and widely used until the actual war. Using the telegram wasn't easy because the user needed to know Morse Code, but once that got figured out sending messages progressed into a huge advantage (for mainly the North). This then meant that, not only were the messages being sent within seconds but that soldiers could discuss strategies and plans with their commander as well. This proves that even though the Civil War was a time of technological enhancements and discoveries, it was also a justification of bloodshed.

Weapons during the Civil War ranged from a simple Bowie knife to a complex rifle, both causing some serious damage. As the war continued throughout the long four years, the weapons started getting more deadly and efficient, beginning with the pistols. Some predominant pistols that were used at the start of the war were the Derringer Pocket Pistol, Stocking Model 1950, Colt Model 1850 Navy Percussion Revolver, LeMat, and the Lefaucheux 20- Round Double Barreled Revolver. Some significant things about these pistols were that they were small enough to be kept in a coat pocket, and contained enough bullet slots to meet the damage compaction. For example, the Lefaucheux 20- Round Double Barreled Revolver, while it did both of these things, it also made use of almost three times the amount of round cartridge than the average pistol did around that time. Although pistols were very convenient, the main weapon of choice on the battlefield wasn't necessarily a pistol as it was a rifle. The most dominant and efficient rifles used were the Enfield and Springfield 1853 Musket. From these two rifles; however, the one most used was the Springfield 1853 Musket consisting of a 40-inch-long

barrel with the actual rifle being 9 pounds, shooting a range of about 200 - 300 yards. The Enfield was the second most used and best rifle accommodating 69 grist of black powder, and being able to shoot a distance of around 800-900 feet. But the problem with these rifles was that even though they had good shooting advantages, they took a while to reload, which then became a disadvantage by reasons of time management. However, in 1848 the Minie ball was invented by Claude Minie, a French Army Officer. The Minie ball was a diminutive cone-shaped lead bullet that would enlarge when in flight which soldiers could use expeditiously, also causing more precision and wounds. Now, although there was weapons used that worked on cue, there was also ordinance that didn't, such as hand grenades and torpedoes. (http://armscollectors.com/mgs/grenades!.htm) Hand grenades were ineffective because without the grenades being thrown specifically on the nose it wouldn't erupt, and the same goes for the torpedoes. Since they functioned electronically, both The Union and Confederate forces had difficulty detonating their torpedoes. (cite) Even though there were a few minor weapons that didn't work properly, weapons such as cannons and rockets made up for it, by providing several explosives that caused several injuries. All in all, these weapons during the Civil War really helped, because before the military action, soldiers would typically only carry guns that could hold only one bullet at a time and only shoot at a range of 250 yards. (cite) However, to shoot with accuracy, the soldier would have to be within 80 yards of their target, meaning not only was that outrageously dangerous but having to reload every 30 seconds would risk almost every soldier's life. (cite) Furthermore, the new and improved weapons aren't only far more superior but punctual as well.

Medicine in the Civil War was very essential, especially because of the dangerous weapons that were used. For example, the Minie Ball, although it was a very efficient tool, the soldiers who did get hit faced catastrophic injuries, such as shattered limbs. The injuries that were overseen were unpleasant from the leading occurance of the delicate lead Minie Ball, with the ability to slaughter in excess of 1,000 yards causing tremendous but conceivable fixes. Those who did survive through this living hell wrapped in a bullet, had to get amputated, which was the leading and most common medical procedure used. Due to several injuries, surgeons during the war didn't have time for each patient, so when they saw a soldier with a head or gut wound most of the time they presumed them dead or incompetent to respond to treatment, in doing so that focused their time on those they could still save and operate on. During the war there were nearly 60,000 amputations procedures performed, which were all mostly chosen by the soldiers and advised to them for a better chance at survival. Amputations were performed with large sharp innovative blades, so cutting through skin and muscle wouldn't be too laborious. Next, the surgeons would utilize a bone saw to induce through the bone to reach the affected area and achieve the settled space. Lastly, a tenaculum was used to haul the parts out safely. Alongside those tool was also a mini saw, that would be used to cut off infected smaller areas such as fingers and toes. Drugs that were utilized in this procedure enclosed medical alcohol, which was used to stop minor bleeds, a wood stick, to keep the tongue down, and morphine, to calm the patient. Additionally, the amputations had different mortality rates based on the part of the body. The upper body had a 23% rate and the highest and most troublesome being hip amputations with an 83% rate. Since the hip amputations were very extreme most doctors time were spent on those patients rather than the less fatal ones. In doing this, the injured and what was fatal became the recovered, and this not only modified the results of the war but medicine enhancements as well.

In conclusion, the civil war was a very traumatic war, but could have been a lot worse if the proper use of technology, weapons, and medicine wasn't embodied. Technology provided new

transportations and strategies. Weapons gave way to new improvements, meeting better expectations and damage, and medicine was requisite to the war and helping the injured. All three of these were extremely important in reducing the amount of deaths in the war. This significant occurrence spawned successes for subsequent warfare's giving way to prevailing enhancements, and inventions in technology. However, this phenomenon that was 154 years ago, still has a draw on us today, because it was the first war that marked technology reinforcements, wars after followed in its footsteps, for example WWI and WWII. Even though both wars were in different time periods, with 21 years between them, they both followed after The Civil War with better advancements then if the Spanish-American War would've followed directly after. The Civil War not only set the stage for technology, weapons and medicine but it also built a foundation on how a war should be prioritized and fought.