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Machine Guns in World War 1

World War 1 was the first war that machine guns were used. Previous battles were won by the side with the best sharp-shooters and the men who were best in hand to hand combat. Machine guns changed everything and war became more impersonal because soldiers no longer had to look into the eyes of the people they killed. The machine guns used were mainly based off of a concept designed by a man named Hiram Maxim. In 1884 Maxim had designed a machine gun with the concept of keeping the gun as simple as possible. The gun operated by the gas made from the explosion of the powder in each cartridge. That created a recoil which helped continuously power the machine gun. No outside power was needed to operate the machine gun. Guns in the pasts that were rapid fire often used hand cranks to power them. Hiram Maxim first offered his gun to the British but they declined and thought it was an improper way of war. The Germans disagreed and made their own version of Maxim's gun which they used in battle very effectively. By the time the British had decided to use machine guns like the ones the German's were using most companies making guns had sold their guns to the Germans. Therefore the British were unable to get them.

Although the machine gun was a huge advancement in weaponry during World War 1, it also had many flaws which limited its effectiveness. They were not an effective offensive weapon because machine guns had poor mobility for soldiers on the run. They were very heavy

and weighed anywhere from 30kg-60kg, which does not even include the weight of all the other materials you need to operate the weapon such as mountings and ammunition. The machine gun was most often used while mounted on a tripod and was operated by a crew of four to six men. An average machine gun could fire 600 small calibre rounds per minute. The problem was soldiers had to fire in bursts because if they did not the gun would over heat. To prevent from overheating guns would be cooled by water or by air cooling. It took lots of water to keep the guns cool so sometimes soldiers would have to urinate on the weapon when they were running low on water. Also in warm weather the machine guns were known to jam very easily. Due to all these flaws the machine guns were often grouped together to keep a constant defensive position because soldiers could never rely on just one machine gun.

From an offensive perspective soldiers were unable to be running around with 60 kg machine guns trying to kill each other. In 1918 a submachine gun was invented that was lighter than the other machine guns. It was called the Bergmann MP18 but soldiers quit using it as an offensive weapon because maintaining enough ammunition was challenging. The most common times machine guns were used offensively was when they were put on tanks and airplanes. On defense the machine gun was used with much more purpose and effectiveness. Machine guns were placed strategically along trenches and it caused many casualties to enemies running through no man's land. The french soldiers were greatly impacted by this because the Germans defense caused as much if not more fatality as their offense.

The Germans standard issue machine gun was the Maschinengewehr 08 better known as the MG08. This gun was almost a direct copy of Hiram Maxim's gun from 1884. The MG08 was water cooled via a jacket along the barrel of the gun. It fired 400 7.92mm rounds per minute.

Sustained firing on this gun lead to overheating. That is why it was water cooled. It's effective range was 2200-4000 yards. This gun was mounted on an object called a "Schlitten" which had to be carried by people or carts. When World War 1 started there were 12,000 MG08's in circulation in the war. As the war went on the demand for the gun went up and companies started making them at a rapid rate. It went from companies producing 200 a month, to in 1916 making 3,000 a month, to in 1917 making 14,400 a month. Over the years the gun had minor changes to improve its use such as making it lighter, so it could be used for offensive attacks.

The British standard issue gun was the Vickers. This gun was also closely modeled after Maxim's gun. This gun was formally adopted by the British army in 1912. It took a team of six men to operate. It was water cooled by a jacket around the barrel. It contained around one gallon of water. It was loaded with a 250 round fabric belt and was mounted on a tripod. It fired .303 inch ammunition and could fire 450 rounds per minute. The Vickers weighed 20 kg which was less than the MG08. Although a big problem with this gun was after firing about 10,000 the gun needed to be replaced. After a while it was replaced by the Lewis gun. The British referred to the Vickers as "the queen of the battlefield."

The machine gun impacted the war because it impersonalized the war making it easier for people to kill each other. Soldiers no longer had to look each other in the eye when they were fighting or when they killed each other. It allowed the war to be fought from a longer distance. It also gave the Germans an advantage because they were the first to really use the machine gun effectively and properly as a defensive weapon. The Germans caused many fatalities by strategically placing their machine guns along their trenches. It gave them an advantage in the war.

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