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**ERASMUS+ PROJECT ASSIGNMENT**

**“A retrospective look at technology and the inventions during the Great War”**

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## INVENTIONS AND TECHNOLOGICAL ADVANCEMENTS DURING THE WORLD WAR ONE



Technology during WW1 reflected a trend towards industrialism and the adaptation of mass production methods to weapons and to the technology of warfare in general. This trend, which can be seen even today, began about fifty years prior to the Great War, during the American Civil War. In 1915, when the Great War was at its crescendo John Fisher, an English commander denoted “The war will be won thanks to new inventions.”

The First World War introduced or popularized some of the deadliest inventions of the 20th Century like the poison gas, tanks, but there were also quite a few inventions that by all odds are still used by the modern men in the everyday life. All these things that are still in use both in everyday life and for special purposes were invented during the WW1.

### ***Tanks***

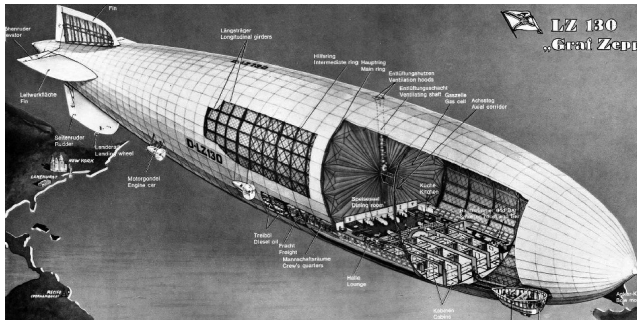
The concept of tank had been suggested in 1890s but the invention and the active use of them coincides with the Great War. Allied forces planned to use tanks to surpass the obstacles on the battlefield and to reduce the casualty on their own side while multiplying the casualty numbers on the enemy lines; yet early prototypes were unreliable and they failed to function properly .

After a few upgrades and being equipped with heavy weaponry, tanks became fearsome war machines on the battlefields of Europe. In the following years of the war, tank technology and the mechanical warfare grew increasingly sophisticated and made the trenches obsolete.



Tanks were first used in WW1 and they made trench warfare obsolete.

## Zeppelins



At the beginning of the war, zeppelins were used by the German forces, which later was replaced by airplanes.

First zeppelin was invented by a German named Ferdinand von Zeppelin for non-combat purposes. The first flight was held in 1900 and used for carrying passengers. During the WW1, Germans used them to bomb the enemy targets, however, they were quite slow with limited mobile

capacity and filled with hydrogen which is a flammable gas. Thus, zeppelins, becoming sitting ducks for the Allied Forces, were later out of fashion and replaced by a more swift and effective vehicle, aircrafts.

## Submarines

The submarine, being one of the most influential war machines of the 20<sup>th</sup> century was not widely used until 1900s. However, after Rudolf Diesel, a German scientist upgraded them with more resistant diesel engines, become a lethal weapons for the German navy. They effectively used U-boats in the Atlantic and the Mediterranean and sank many battleships as well as merchant ships and cruises. After intense German U-boat attacks to the American ships forced the US to enter the war and this changed the course of combat dramatically.



Submarines, German U-boats were effectively used by German Navy.

## Sanitary Pads

As mentioned before, technological advances during WW1 was not only for the war machines but also for everyday tools that we even use in everyday lives. Many new tools were invented to make the lives of soldiers and the workers in the hinterland easier. Sanitary pads, which women use in their special days, was produced by an American firm Kimberly Clark before the WW1. During the war, the use of pads became widespread. In 1921, just after the war, Kimberly Clark marketed the first hygienic trademark "Kotex".



Commercial of the first pad trademark, Kotex.

## The Zipper



The zipper actually existed in the 19<sup>th</sup> century but until the 20<sup>th</sup> century, soldier uniforms were sealed with buttons, until the US military produced new uniforms for their troops during the WW1 and they had a zipper. This happened to be a fantastic idea since it protected the troops from wind and rain. This became a turning point and after the war the zipper has become an indispensable part of everyday life.

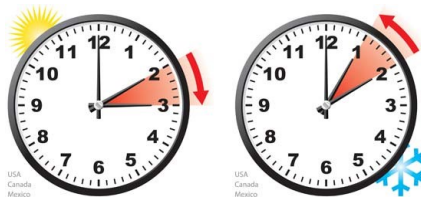
## Stainless Steel



Stainless steel was used in heavy weapons

Stainless steel, also known as inox steel, is a steel alloy with a minimum of 10.5 or 11% chromium content by mass. Stainless steel does not stain, corrode, or rust as easily as ordinary steel, but it is not stain-proof. The idea behind stainless steel was discovered in the first part of the 19th century, but it took about 80 years to develop a reliable industrial method. French, British and American inventors worked on this until a genuine stainless steel was produced. The invention of modern stainless steel can be dated to 1913, and it was done by Harry Brearley in Sheffield, Yorkshire. He produced the material for the Royal Army to use in tanks and heavy machinery against the German forces.

## ***Daylight Saving Times***



Setting the clocks an hour ahead was an idea that came up during the war. By 1915 Germany was short on fuel and to save artificial light during autumn and spring the government let the time be set forward in April

1916. Starting on 30 April 1916, Germany and its World War I ally Austria-Hungary were the first to use DST as a way to conserve coal during wartime. Britain, most of its allies, and many European neutrals soon followed this. Russia and a few other countries waited until the next year and the United States adopted it in 1918.

Broadly speaking, Daylight Saving Time was abandoned in the years after the war (with some notable exceptions including Canada, the UK, France, and Ireland for example). However, it was brought back for periods of time in many different places during the following decades, and commonly during the Second World War. It became widely adopted, particularly in North America and Europe starting in the 1970s as a result of the 1970s energy crisis.

## ***Vegetarian Sausages***



Food was hard to come by during the war and after the winter during 1916 and 1918 hunger was pretty much a prominent situation. Konrad Adenauer, the first German chancellor after

World War Two, was quite a tinkerer and he made a sausage out of soy, which was pretty much genius. So, vegetarians today should thank Konrad Adenauer.

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