

# World War I tanks and their impact on future warfare - how new inventions changed the battlefield?



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# Introduction

Nowadays armored forces are the basic conventional major part of land forces. Their strong position was strengthened during the second world war, but the first world war had the biggest impact on their future development.

British Mark I  
produced in  
years 1916-1918  
(150 copies were  
made)

## Role of tanks at the beginning

A black and white photograph of a tank in a trench. The tank is positioned in the foreground, with its turret and main gun visible. The tank is surrounded by earth and debris, suggesting a battlefield environment. In the background, another tank is visible, partially obscured by the terrain. The overall scene depicts the early use of tanks in combat.

At first, tanks were used as a support for soldiers and breaking lines of defence. This doctrine has been changed with time as tanks started to be seen as individual firepower that could be used in combat. This led their development in order to make them faster, lighter and even more deadly.



**What tanks of each country have  
changed in warfare?**

# Role of France in the history of tanks

A black and white photograph showing several Renault FT tanks in a field. The tanks are arranged in a line, with the most prominent one on the right side of the frame. The background is a dense forest of tall, thin trees. The sky is overcast. The tanks appear to be in a field of tall grass or weeds.

How did Renault FT became one of the best tanks used during World War I and what impact did it had on future projects?

# Introduction and first projects



The first time, that France appeared in the history of tanks was inventing the vehicle with the cannon and tracklaying drive in 1903. It was called Levavasseur. The real expansion of tanks started during the First World War. Till today historians dispute who was the first to use the combat vehicle: Great Britain or France? Country, that's Germany neighbour gave to the tanks some crucial innovations like rear drive or the classic construction of majority of modern models.

## Success of Renault FT



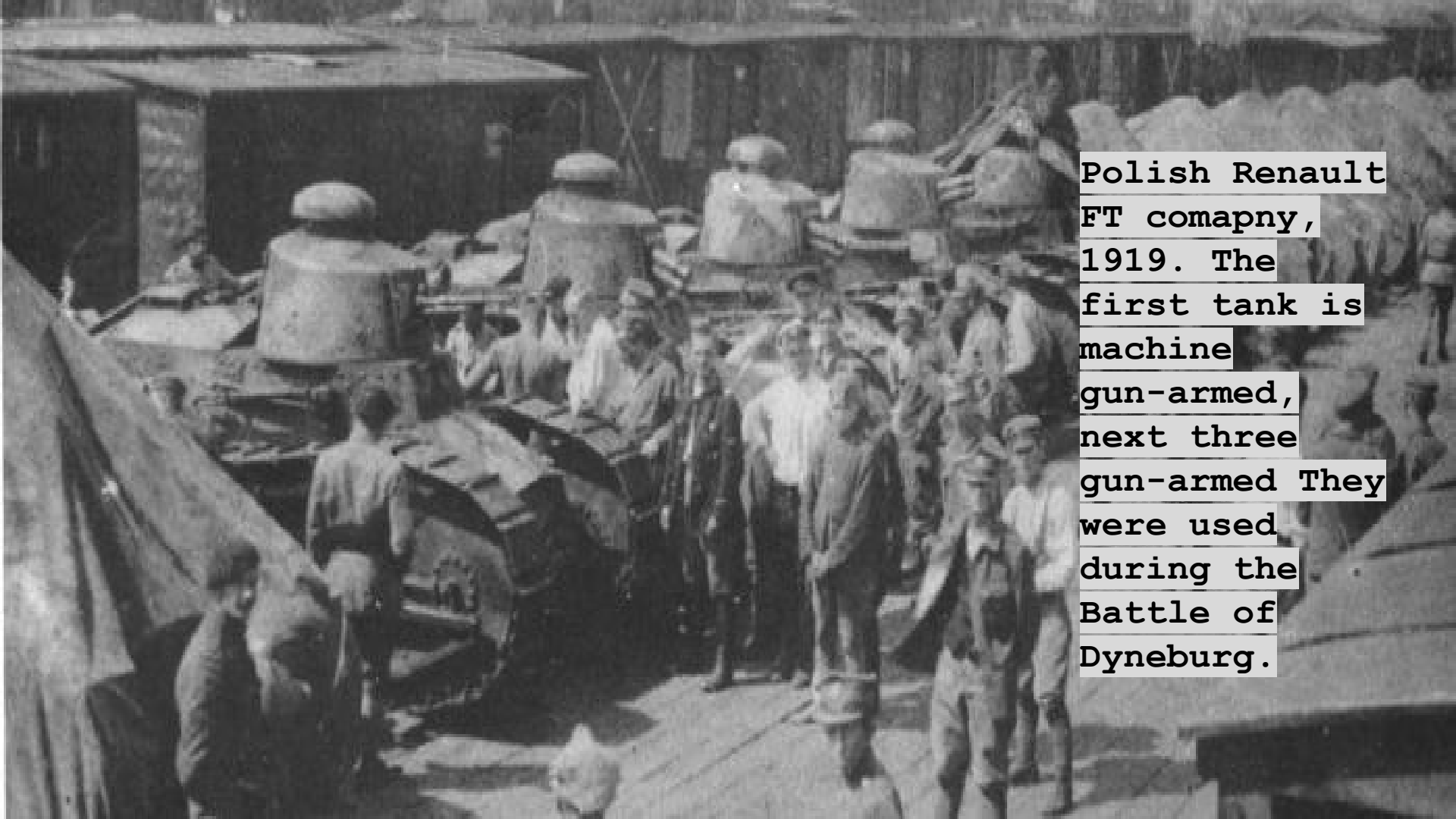
Renault FT-17 is said to be the most useful tank made during the First World War. It had much lower weight than the other models (only 6,5 t) and was smaller. These features gave it developed manoeuvrability. Also, that's why constructors had opportunity to focus on the armour. The tank susceptibility for being destroyed by bullet became minimal. The most considerable trait of FT-17 was having a full 360° rotation turret, used in a tank for a first time.

## Advantages of Renault FT

A black and white photograph of a Renault FT-17 tank. The tank is shown from a side-rear perspective, highlighting its turret and tracks. The turret is a small, boxy structure with a single main gun barrel and a secondary machine gun barrel extending from the rear. The tank is positioned on a dirt or gravel surface. The overall image has a grainy, historical quality.

Speed higher around fivefold than other models became another advantage. The FT-17 was as incredible and innovative, that every country, which wanted to start its own tanks production, took Renault's construction as a basis.





Polish Renault  
FT company,  
1919. The  
first tank is  
machine  
gun-armed,  
next three  
gun-armed They  
were used  
during the  
Battle of  
Dyneburg.

## Innovative Char 2C



Another known tank introduced by France is Char 2C. It was predicted to be the most powerful combat vehicle. Renault FT-17 was small, so it was facing some difficulties with going through the rows. Constructors wanted to give Char an ability to overcome all the moats and trenches. Also, it was equipped with very resistant armour and 75 mm cannon.

## Good and bad sides



Unfortunately all that innovations made the tank very heavy. Only 10 of them were produced. This situation shown, that the huge size of the tank isn't considerable trait. Even with all that disadvantages, Char 2C became the most powerful machine of 1920's. It's armament and speed were important for the future of tanks' industry.



Super heavy tank  
Char 2C FCM,  
number 97 named  
Normandie (later  
changed to  
Lorraine) after  
capture by  
German forces in  
eastern France,  
June 1940



**Renault FT**

**Char C2**



# Role of Germany in the history of tanks



What impact did Germans' projects had on development of tanks such as Panzer III commonly used during World War II?

# The beginning and first project



The Germans started to design and build their tanks as to follow appearance of early British tanks on the Western Front.

The project to design and build the first German tank was given in hands of Joseph Vollmer, who was these times' leading automobile facturer in the country. Soon, because in 1916, Sturmpanzerwagen A7V was introduced.

# Sturmpanzerwagen A7V specifications

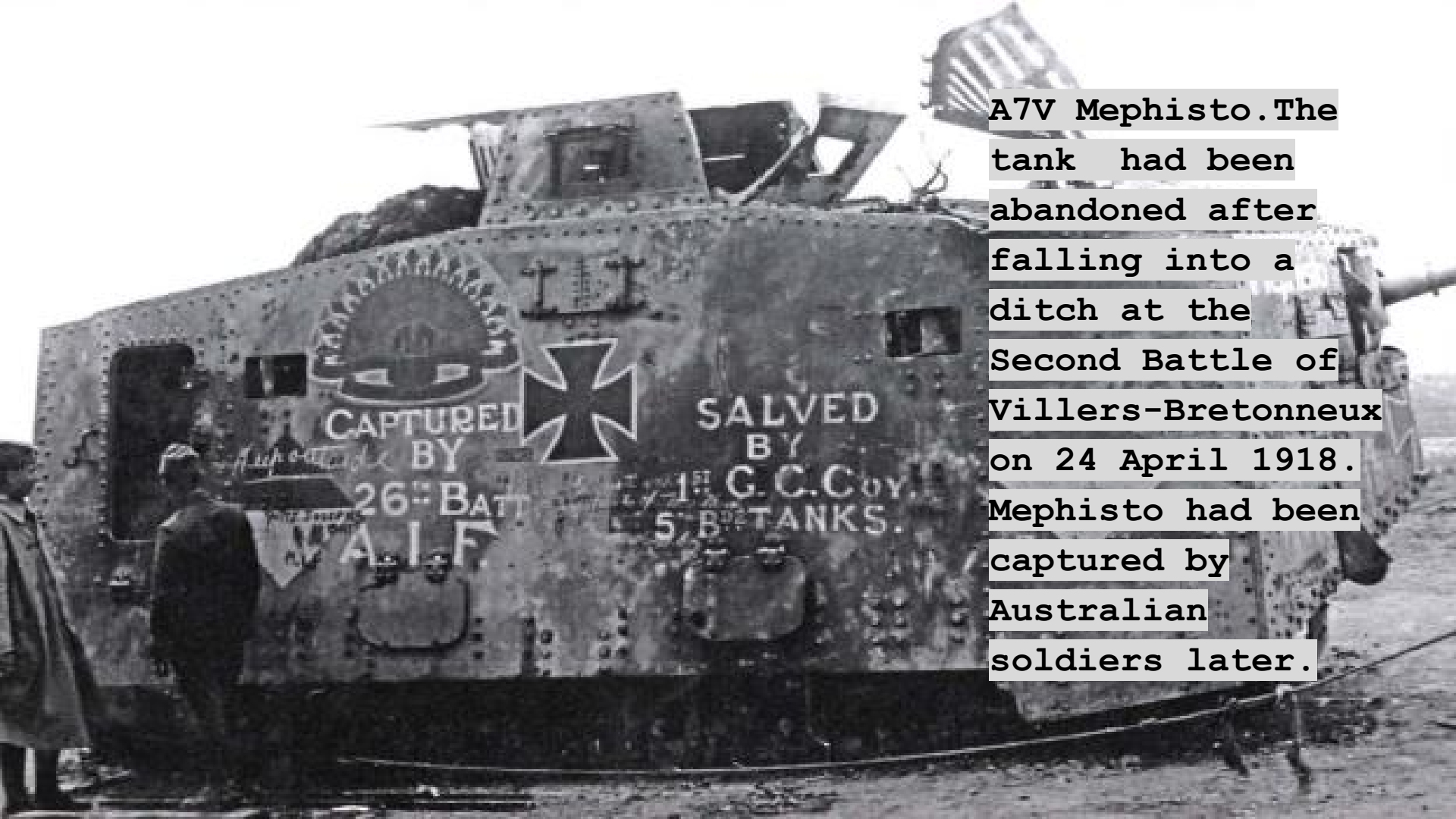


The A7V was 7,34 metres long and 3 metres wide, with height of around 3,3 m. Tank was 33 t of battle weight. A7V normally consisted of up to 17 soldiers and one officer.

A7V was armed with 40 to 60 cartridge belts, each of 250 rounds and 180 shells for the main gun ('male gun').

Armor: front - 30 mm, rear & sides - 15 mm, top - 6 mm.





A7V Mephisto. The tank had been abandoned after falling into a ditch at the Second Battle of Villers-Bretonneux on 24 April 1918. Mephisto had been captured by Australian soldiers later.

## A7V overall efficiency



Despite the fact that Sturmpanzerwagen's project seemed to be innovative, it came out not adapted to battlefield conditions.


The whole construction was too heavy, making the tank impractical on uneven terrain. Short tracks caused A7V to be relatively unsafe and uncontrollable. The biggest advantage of A7V was armor which outstated even British designs.

A7V turned out to be a decent first try in constructing German tanks. Not enough time and funds to develop A7V further were caused by losing the war.

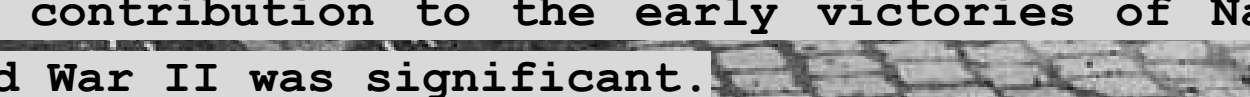
# How project of A7V changed future German tanks?

A black and white photograph of the A7V tank, a German light tank from World War I. It is a small, tracked vehicle with a turret and a machine gun mounted on top. The tank is shown from a side profile, moving across a field.

A7V opened the way for future tanks development. Next designers knew what to upgrade, because of Sturmpanzerwagen's weak sides such as big weight and construction hard to control - new projects were aimed to be smaller, faster and have more fire power. such prototype was Leichttraktor, which showed the general pattern of the way in which tanks development would go.

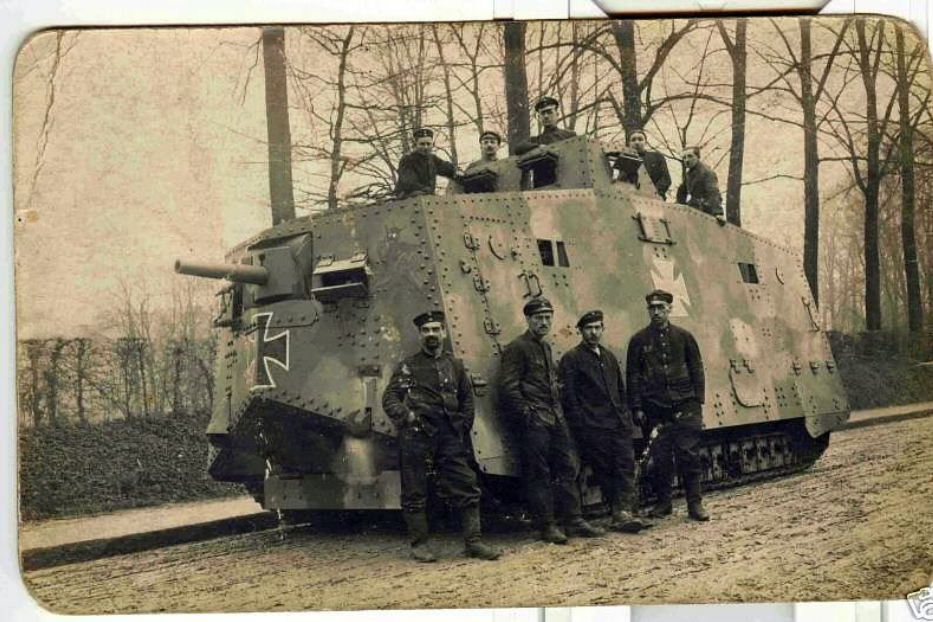
A black and white photograph of the Leichttraktor tank, a German light tank from World War I. It is a small, tracked vehicle with a turret and a machine gun mounted on top. The tank is shown from a side profile, moving across a field.

Next years were full of constant work over new projects. Following the construction of Leichttraktor, it can be said that Panzer I (produced in 1930s) was 'perfect offspring' of A7V as it was the Panzer I's contribution to the early victories of Nazi Germany during World War II was significant.

A black and white photograph of the Panzer I tank, a German light tank from World War II. It is a small, tracked vehicle with a turret and a machine gun mounted on top. The tank is shown from a side profile, moving across a field.



From Panzer I  
were developed  
such tanks as  
Panzer III and  
Panzer IV,  
whose design  
has been  
suggested by  
Heinz Guderian.



Leichttraktor

A7V



# Pz I Ausf A



# Role of the Britain in the history of tanks



What impact did the British tanks had on the history of wars?

# The beginning and the first project



Britain was the first country, that actually used tanks. The truth is that British used word tank on purpose to mislead their opponents.

The first tank was the Mark I which was used for the first time in 1916. Its task was to help infantry in the battle of Somme



# Mark I specifications



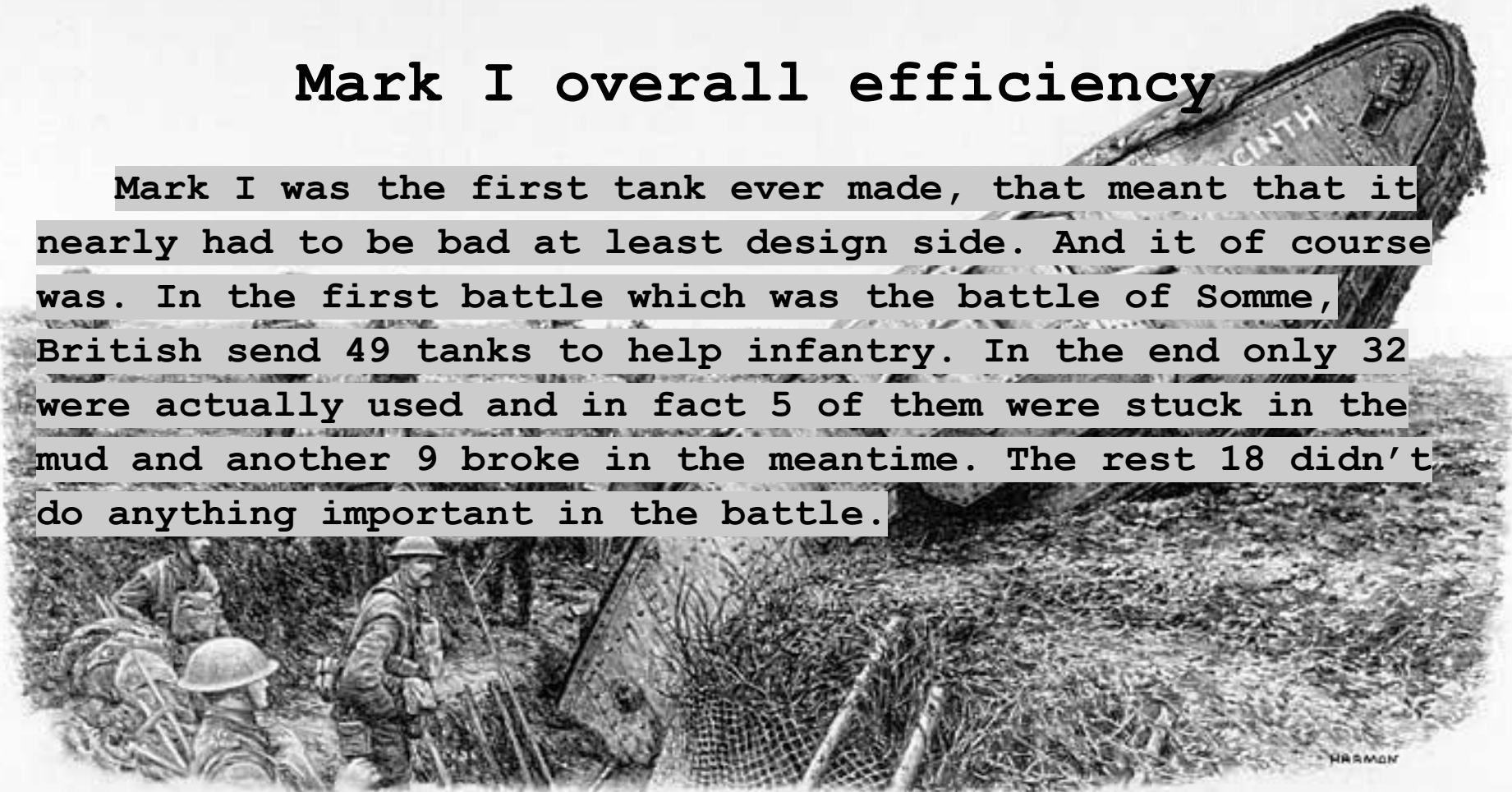
Mark I was 7,93 meters or 9,90 meters if it was equipped with a steering wheel. It was 4,13 meters wide and 2,45 meters high. It was lightweight as it was weighed at 26 tons, which made it quite light for a tank. It could accommodate up to 7 soldiers.

Mark I had two versions which we can distinguish through their armament. In the first version (female) Mark I had five machine guns, second type Mark I had two cannons and three machine guns

Armor: From 6mm to 15 mm.

# Mark I overall efficiency

Mark I was the first tank ever made, that meant that it nearly had to be bad at least design side. And it of course was. In the first battle which was the battle of Somme, British send 49 tanks to help infantry. In the end only 32 were actually used and in fact 5 of them were stuck in the mud and another 9 broke in the meantime. The rest 18 didn't do anything important in the battle.



# Medium A specifications

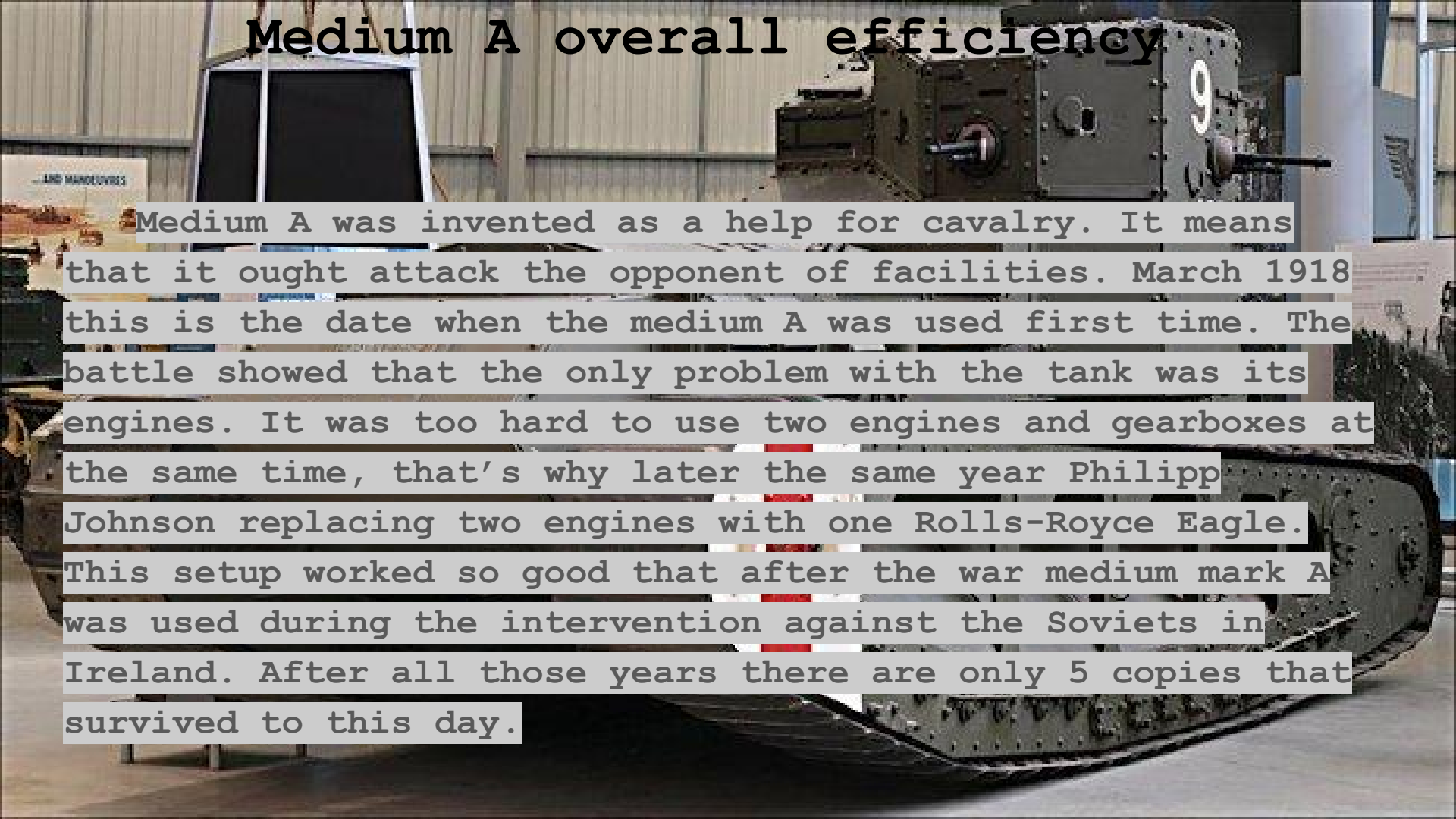


Mark A was 6,10 meters, 2,62 meters wide and 2,75 meters high. It was even lighter than its predecessor weighing at 14,3 tons. Inside there was so little place that the whole tank could take only around 4 soldiers.

It was armed with 4 machine guns Hotchkiss Mk. I LMG 7.7 mm caliber. It could take 5400 bullets for those machine guns.

Armor: From 6mm to 15mm.

# Medium A overall efficiency

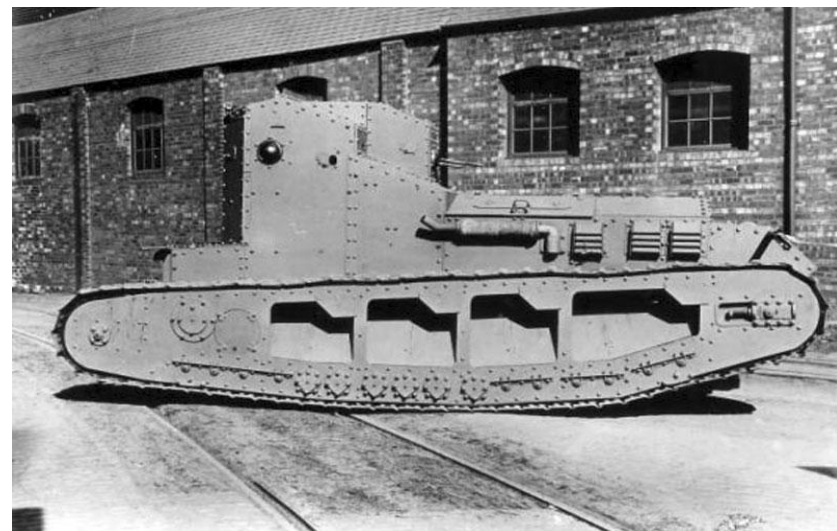


Medium A was invented as a help for cavalry. It means that it ought attack the opponent of facilities. March 1918 this is the date when the medium A was used first time. The battle showed that the only problem with the tank was its engines. It was too hard to use two engines and gearboxes at the same time, that's why later the same year Philipp Johnson replacing two engines with one Rolls-Royce Eagle. This setup worked so good that after the war medium mark A was used during the intervention against the Soviets in Ireland. After all those years there are only 5 copies that survived to this day.



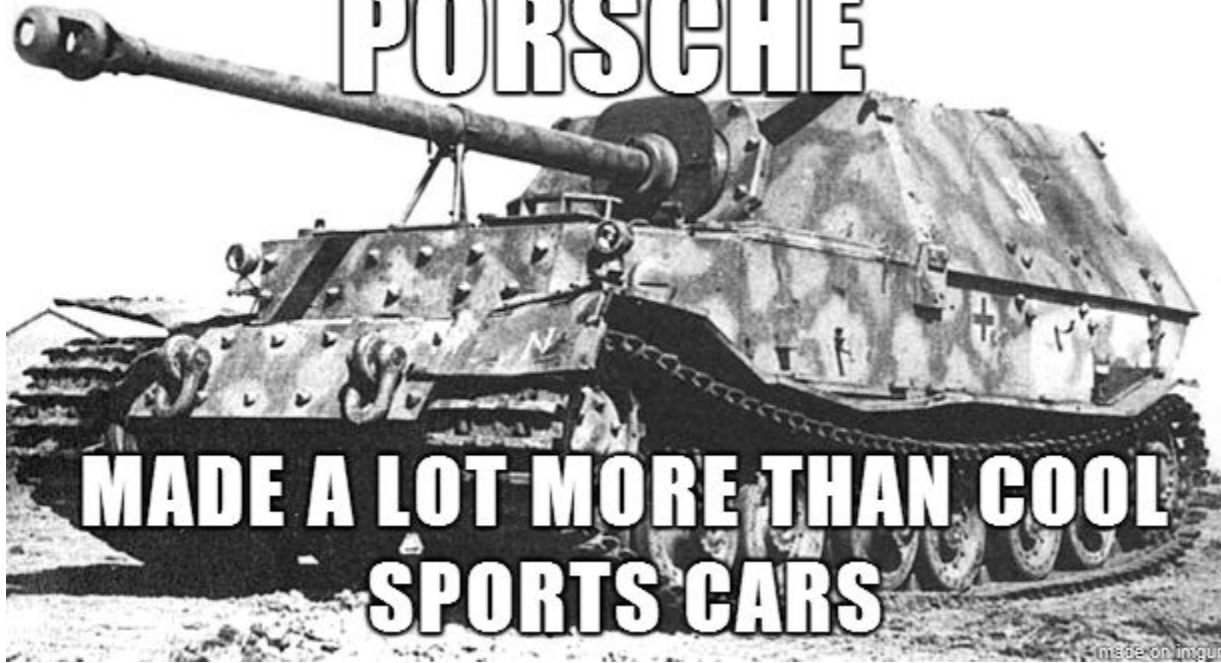
**Mark I**

**Medium Mark A**



T(h)ank you for attention!

PORSCHE



MADE A LOT MORE THAN COOL  
SPORTS CARS

made on imgur

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