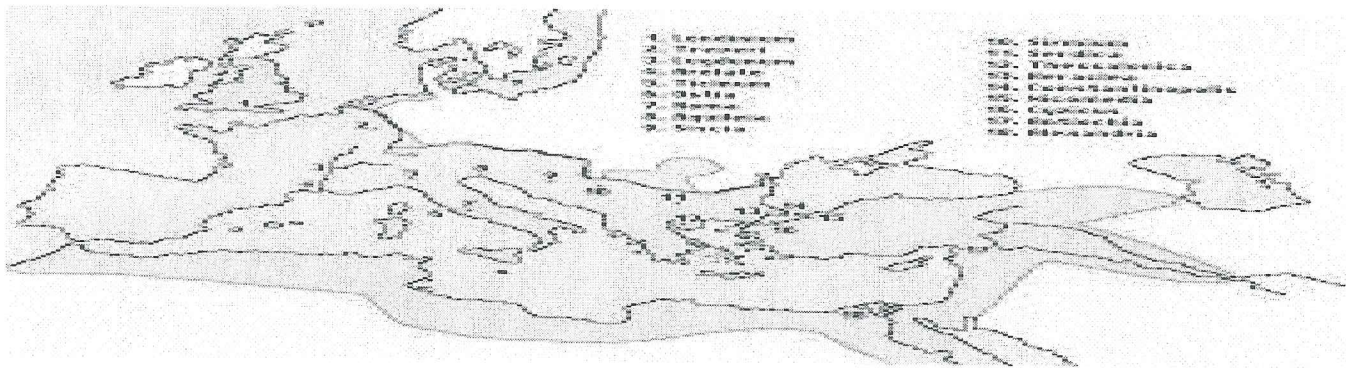


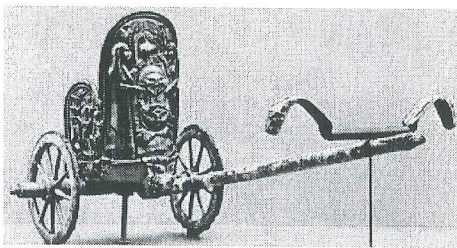
IMPORTANT ROMAN INVENTIONS

Keita Bodrogi

The Roman Empire thrived for almost 1300 years. From 756BC all the way to 473AD. The Romans could not have done that without the help of these very important inventions and discoveries. These are some of the most influential developments that had a huge impact on history. These inventions, developments, and discoveries had an impact on war, architecture, and even business and are still sometimes used today.



The Roman Chariot



Chariots were first built by the Proto-Indo-Europeans, in 3000BC but were improved to a great extent by the Romans at the beginning of their Empire. The Roman chariot was made in many numbers. Scientists believe the Romans made almost 100,000 of them. In battle, they would send in 1,000 of them in a straight line and the passenger would shoot arrows at the enemy. The chariot impacted many wars, especially in the 1st century AD. War was the main way to expand your empire, so if you have good armies or good war machines, you would have a large area.

This war machine was also used in races and was a main mode of transportation over long distances. The reason this chariot was so successful was because of the suspension box.

The suspension box was where the pole and the axle connected. The wood where the pole touched the filled box was slightly rotted, so it would be softer.

This would allow both poles to bounce up and down and would allow for a smoother ride, allowing you to shoot arrows off of the chariot with accuracy. Also, the chariot had incredible manoeuvrability due to its light weight steam bent wood.

Suspension: a series of shock absorbers and springs that lets a vehicle move smoother on the road

Steam bent: a way of bending wood by putting it in a steam box for hours then bent by a machine

Concrete

Concrete was created by Vitruvius in 56BC. Concrete played a huge role in the world of architecture in the ancient Roman times. Most aqueducts, arches, dams, and bridges were made of concrete. Concrete, also called “Opus Caementicum” has a low water base, giving it a mud-like texture when wet, and hard when dry. Some even say that ancient Roman concrete is more durable and generally better than today’s modern cement. Concrete was so important because without it there would be no bridges, buildings, roads. Concrete was even used in weapons like arrow heads, spear tips, and some daggers.

Government Social Welfare System

The welfare system was developed by Romans in 122BC. The welfare system was developed by the Romans to help the needy. The Romans also had a system that paid soldiers and government employees. The Romans did not only give money, they gave food, education, medicine, oil, wine, pork, and even shelter to the needy. The Romans called welfare “alimenta” which meant to help. The money the Romans gave to the needy was special coins called “tesserae”.

Roman Numerals

I II III IV V
VI VII VIII IX X
XI XII

Even though the Greeks had complete domination over Rome in mathematics, the Romans never really cared about math. They had no

practical use for it. When Christianity became Rome's official religion, they cared even less. The only reason Romans created Roman numerals was for counting money, military troops, and food. But even though the Romans never cared about math, Roman numerals are still very common today.

Julian Calendar Keita Bodrogi

Julius Caesar invented the Julian calendar in the year 46BC to plan military plans and their dates. He and a group of other scientists, physicists and astronomers calculated that the earth does a complete rotation of the sun in 365.25 days.

Today, 99% of the world uses the same calendar that was invented 2061 years ago and the Julian calendar still remains the most accurate calendar of all time.

It took Julius Caesar and his team of scientists 2 years to calculate that there was 365.25 days in a year. That's 31,557,600 seconds or 525,960 minutes!

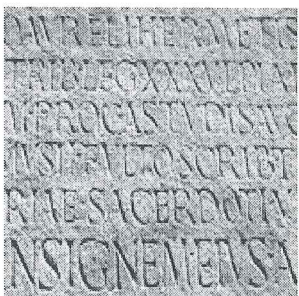
Roads

Roads were very important in ancient Roman times. In fact, by 200AD there were 50,000 miles of road. All of these roads were used for transportation of military troops and equipment and of general transportation. Most of these roads survived over 1000 years and were all made of the same concrete.

VERIFY YOUR LEARNIG

1. WITHOUT LOOKING BACK, WHAT WAS CONCRETE CALLED IN ROMAN?
2. WHAT MADE THE ROMAN CHARIOT SO SUPERIOR?
3. HOW LONG DID THE ROMAN EMPIRE SURVIVE?
4. WHAT WEAPONS WERE MADE OF CONCRETE?

Public Communication



The Romans had the first recorded newspaper in the year 131BC. These so called newspapers were called "Acta Diurna" meaning daily acts. They included special events like executions or gladiator fights. They also included birth and death notices, and military events like wins or loses of battles. They were carved into stone with a sharp piece of metal.

ACTIVITY

1. Without looking back, what were “daily acts” called in Roman?
2. Why did the Romans create Roman numerals?
3. What did the Romans give to the needy in welfare?
4. How many miles of road were created by 200AD?
5. Can you think of any ancient roman inventions that are still used today?
6. If you had at least one answer in question 5, does it have an importance in our everyday lives? Do you have one? If so, where did you get it?

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