

also designed the first air vent in a parachute intended to reduce oscillations.

In 1837, Robert Cocking became the first person to die from a parachute accident.

In 1887, Captain Thomas Baldwin invented the first parachute harness and in 1890, Paul Letteman and Kathchen Paulus invented the method of folding or packing the parachute in a knapsack to be worn on the back before its release. Kathchen Paulus was also behind the invention of the intentional breakaway, which is when one small parachute opens first and pulls open the main parachute.

Two parachuters claim to be the first man to jump from an airplane, both Grant Morton and Captain Albert Berry parachuted from an airplane in 1911. In 1914, Georgia "Tiny" Broadwick made the first freefall jump.

Sebastien Lenormand – Себастьян Ленорман

Faust Vrancic – Фауст Вранчіч

FIRST AUTOMOBILE ENGINE

Доп. - Мелейчук О.С., I-54

Наук. кер. - ст.викл. Початко Т.В

The automobile as we know it was not invented in a single day by a single inventor. The history of the automobile reflects an evolution that took place worldwide. It is estimated that over 100,000 patents created the modern automobile. However, we can point to the many firsts that occurred along the way. Starting with the first theoretical plans for a motor vehicle that had been drawn up by both Leonardo da Vinci and Isaac Newton.

In 1769, the very first self-propelled road vehicle was a military tractor invented by French engineer and mechanic, Nicolas Joseph Cugnot (1725 - 1804). Cugnot used a steam engine to power his vehicle, built under his instructions at the Paris Arsenal by mechanic Brezin. It was used by the French Army to haul artillery at a whopping speed of 2 1/2 mph on only three wheels. The vehicle had to stop every ten to fifteen minutes to build up steam power. The

steam engine and boiler were separate from the rest of the vehicle and placed in the front (see engraving above). The following year (1770), Cugnot built a steam-powered tricycle that carried four passengers.

In 1771, Cugnot drove one of his road vehicles into a stone wall, making Cugnot the first person to get into a motor vehicle accident. This was the beginning of bad luck for the inventor. After one of Cugnot's patrons died and the other was exiled, the money for Cugnot's road vehicle experiments ended.

Steam engines powered cars by burning fuel that heated water in a boiler, creating steam that expanded and pushed pistons that turned the crankshaft, which then turned the wheels. During the early history of self-propelled vehicles - both road and railroad vehicles were being developed with steam engines. (Cugnot also designed two steam locomotives with engines that never worked well.) Steam engines added so much weight to a vehicle that they proved a poor design for road vehicles; however, steam engines were very successfully used in locomotives. Historians, who accept that early steam-powered road vehicles were automobiles, feel that Nicolas Cugnot was the inventor of the first automobile.

After Cugnot Several Other Inventors Designed Steam-Powered Road Vehicles

Cugnot's vehicle was improved by Frenchman, Onesiphore Pecqueur, who also invented the first differential gear.

In 1789, the first U.S. patent for a steam-powered land vehicle was granted to Oliver Evans.

In 1801, Richard Trevithick built a road carriage powered by steam - the first in Great Britain.

In Britain, from 1820 to 1840, steam-powered stagecoaches were in regular service. These were later banned from public roads and Britain's railroad system developed as a result.

Steam-driven road tractors pulled passenger carriages around Paris and Bordeaux up to 1850.

In the United States, numerous steam coaches were built from 1860 to 1880. Inventors included: Harrison Dyer, Joseph Dixon, Rufus Porter, and William T. James.

Amedee Bollee Sr. built advanced steam cars from 1873 to 1883. The "La Mancelle" built in 1878, had a front-mounted engine, shaft drive to the differential, chain drive to the rear wheels, steering wheel on a vertical shaft and driver's seat behind the engine. The boiler was carried behind the passenger compartment.

In 1871, Dr. J. W. Carhart, professor of physics at Wisconsin State University, and the J. I. Case Company built a working steam car that won a 200-mile race.

Steam engines were not the only engines used in early automobiles. Vehicles with electrical engines were also invented. Between 1832 and 1839 (the exact year is uncertain), Robert Anderson of Scotland invented the first electric carriage. Electric cars used rechargeable batteries that powered a small electric motor. The vehicles were heavy, slow, expensive, and needed to stop for recharging frequently. Both steam and electric road vehicles were abandoned in favor of gas-powered vehicles. Electricity found greater success in tramways and streetcars, where a constant supply of electricity was possible.

Nicolas Joseph Cugnot - Кюньо Нікола Жозеф

Oliver Evans – Олівер Аванс

Richard Trevithick - Ричард Тревітік

Carhart - Кархарт