

The history of the invention of the car.

The presentation to the 11 student Evsukova Vadima

English historian and a prominent public figure of XIX century T. Macaulay, an award for his work the title of foreign member of the St. - Petersburg Academy of Sciences, believed that the English historian and a prominent public figure of XIX century T. Macaulay, an award for his work the title of foreign member of St. - St. Petersburg Academy of Sciences, held that:

"Of all the inventions, except for the alphabet and typography, those inventions that reduce distances, most of all made for the benefit of mankind."

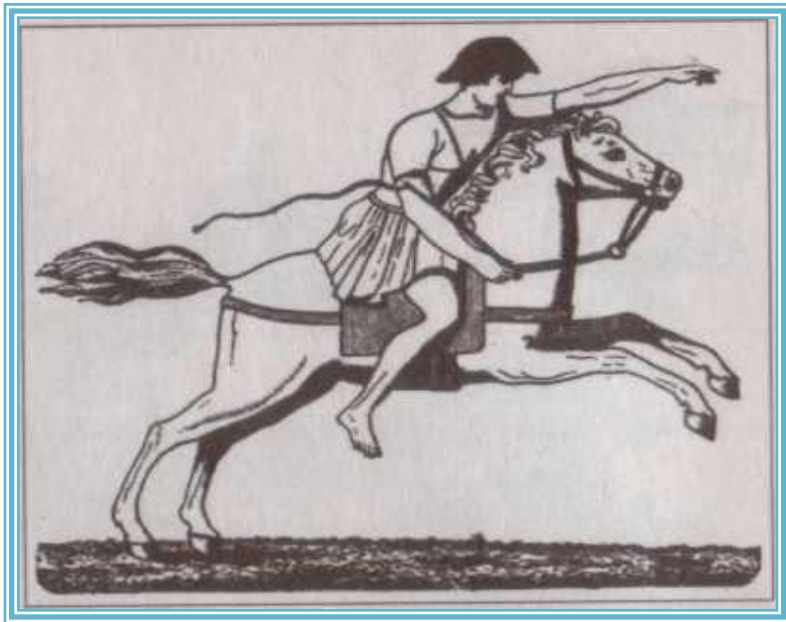
Modern cars.



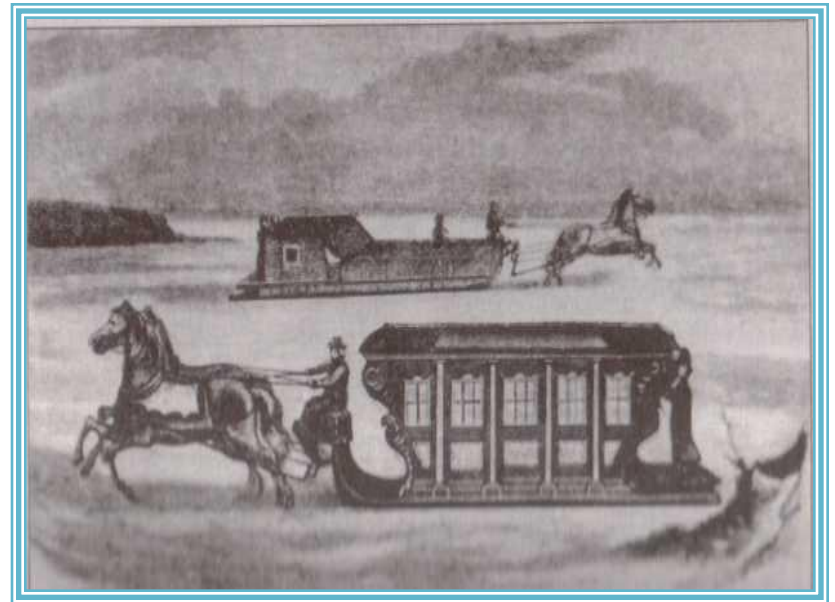
Mankind is constantly made attempts to use technical means to increase the speed of movement. The first method of accelerated motion consider moving on stilts, were used in the Middle Ages, some countries postmen.



Other ancient means of increasing the speed of movement was the domestication of animals and the use of high-speed, among which most often used by horse. Until recently, there was this kind of troops as the cavalry.

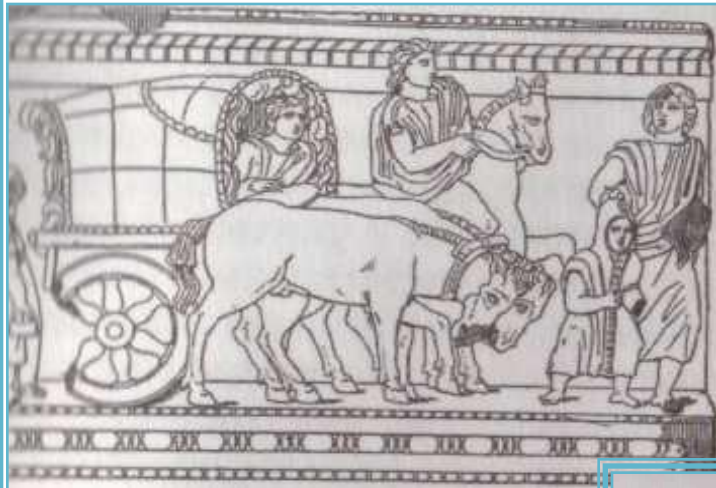


Roman messenger



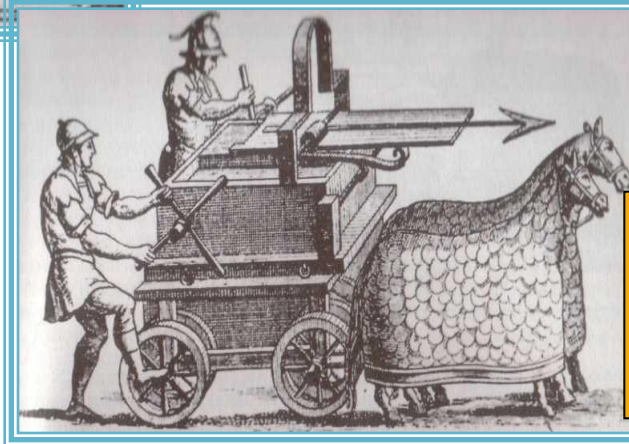
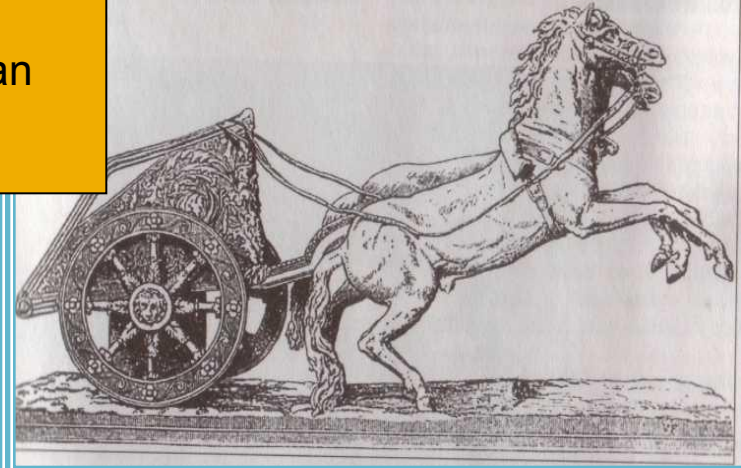
Russian court horse-drawn carriages

Images carts on wheels, and the remains of ancient wheels and carts found in archaeological finds chetyrehtysyacheletney ago



Ancient Roman carriage road

Ancient Roman chariot



Ancient Roman traveling strelometeatelnaya car

The famous English philosopher and scientist of the XVI century Francis Bacon wrote:

"Three things make a great and prosperous nation: fertile soil, active industry and ease the movement of people and goods."

From what began the history of the car?

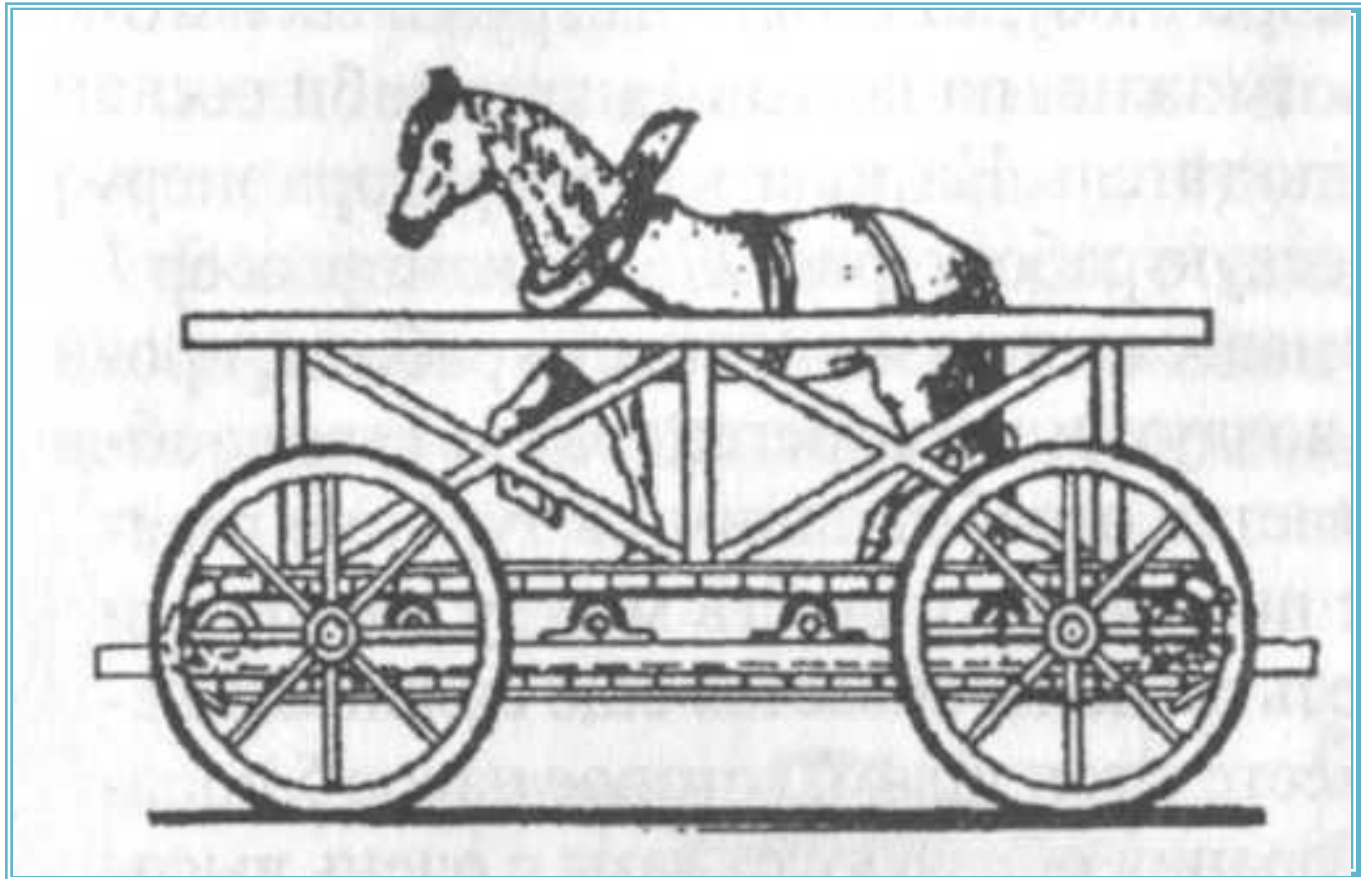
- It can be considered the beginning of the invention of the wheel, which is valid is one of the great technical discoveries of mankind. There was a wheel of about four thousand years ago.

**The word "auto" means
"self-propelled carriage"
but in the modern sense car called
only vehicles equipped with
independent engine (internal
combustion, electric, steam).**

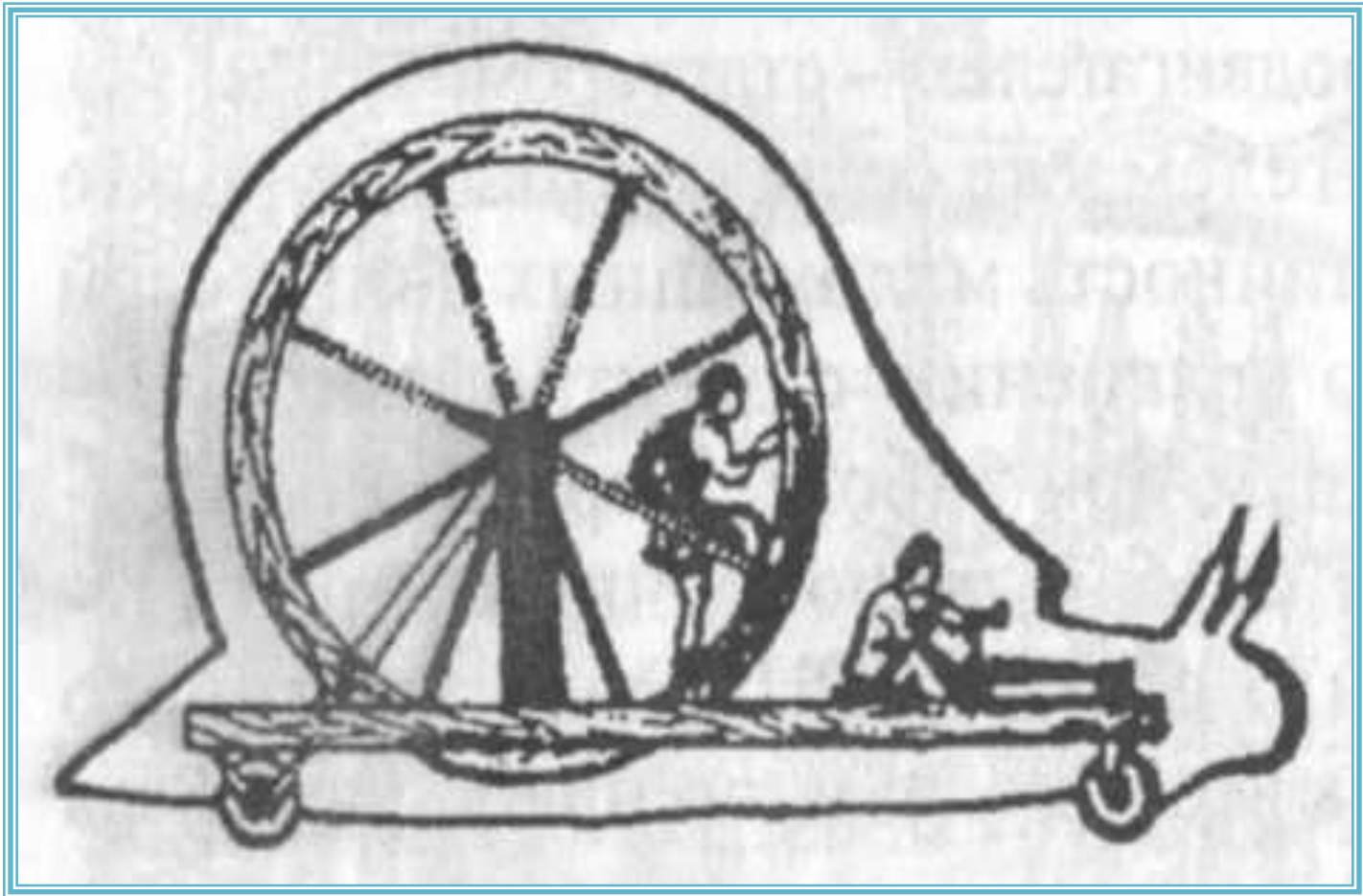
The first motor vehicles.

The car can be called a carriage, which travels by using driving wheels comprises a motor (including live) is driven by the engine to the driving wheels and changes direction manipulation with wheels. That is, it does not determine the route the rails are the direction and directly to the driver, the control wheels - they are turning, braking, and so on. D.

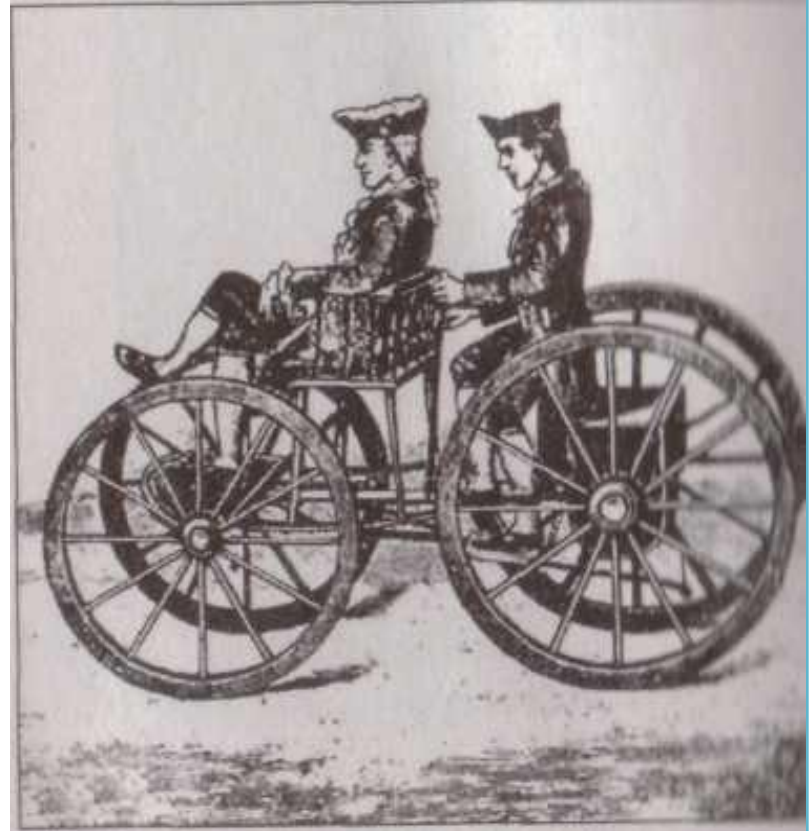
Crew driven by a horse, pushing back the endless track leading the drive wheels



Muskulohod - snail Demetrius Falernian



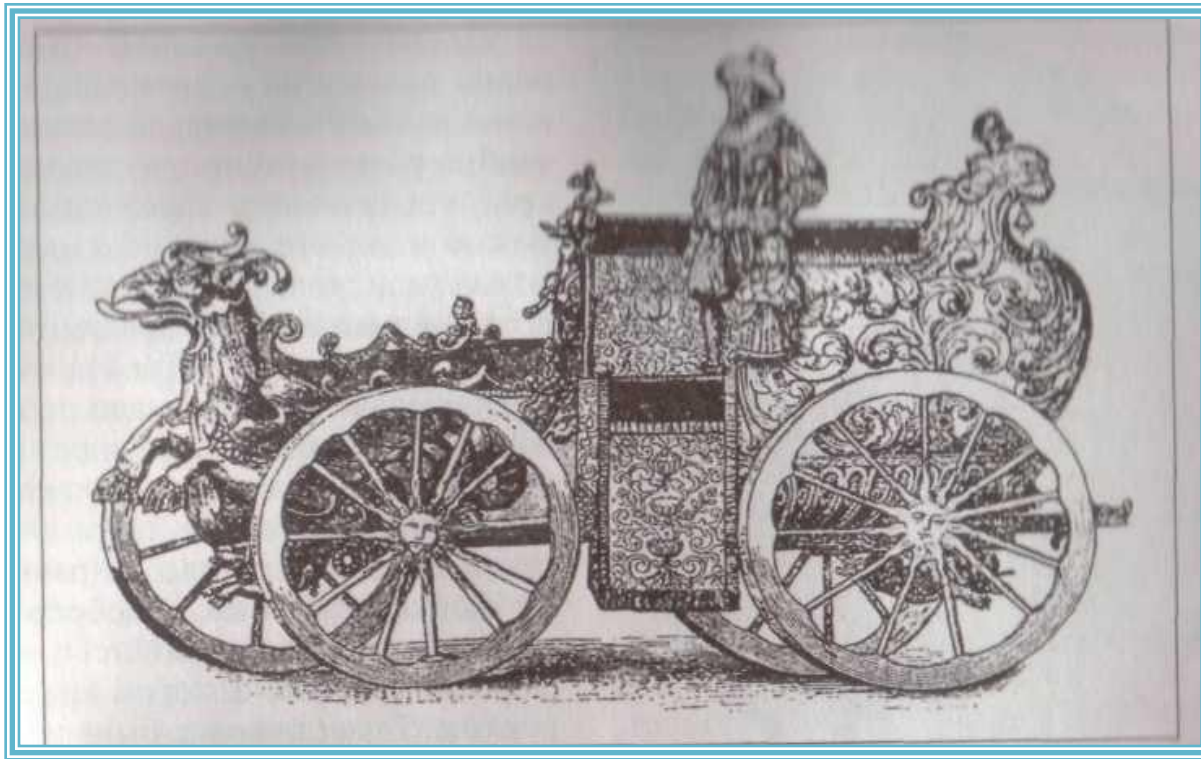
The device of Muskolohody controlled using muscle power of human or animal.



In ancient China, it was ground carts with sails propelled by the force of the wind. In Europe, like sailing carts were built about Simon Stevin in 1600.



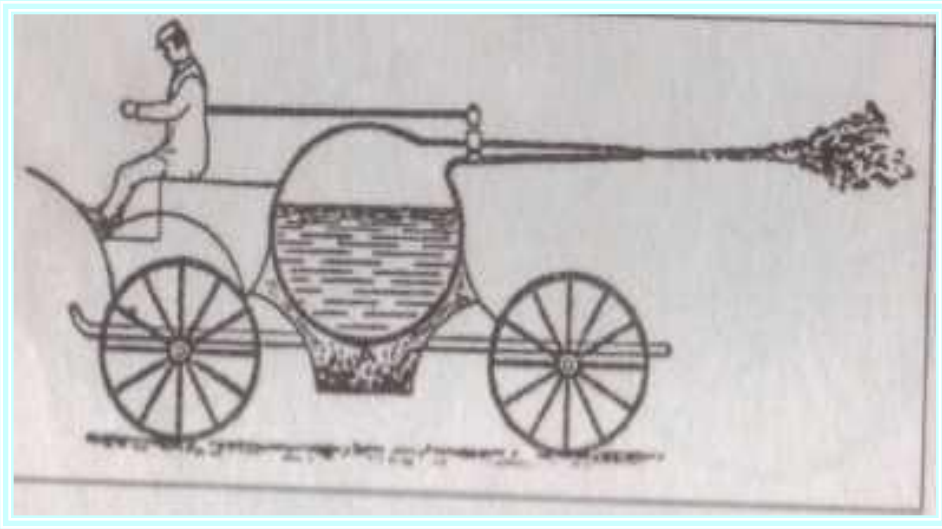
Watchmaker from Nuremberg I.Haus built mechanical wagon source movement that was a big clock spring. Plant this spring was enough for three quarters of an hour.



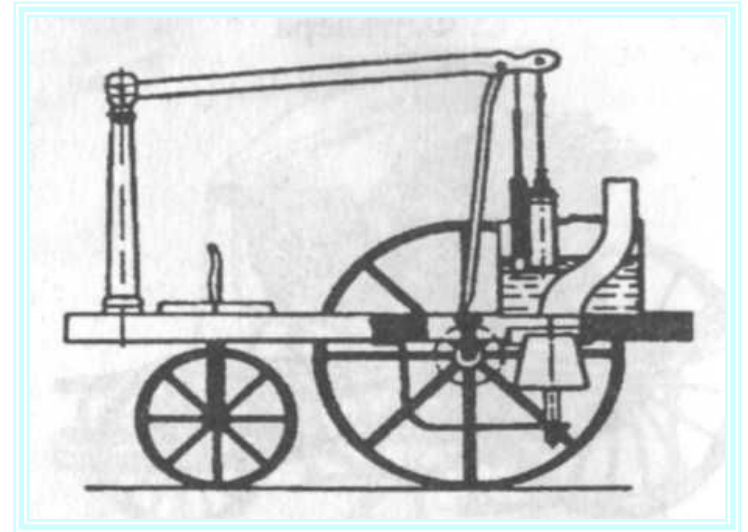
Mechanical carriage I. Haucha spring mechanism

Steam cars

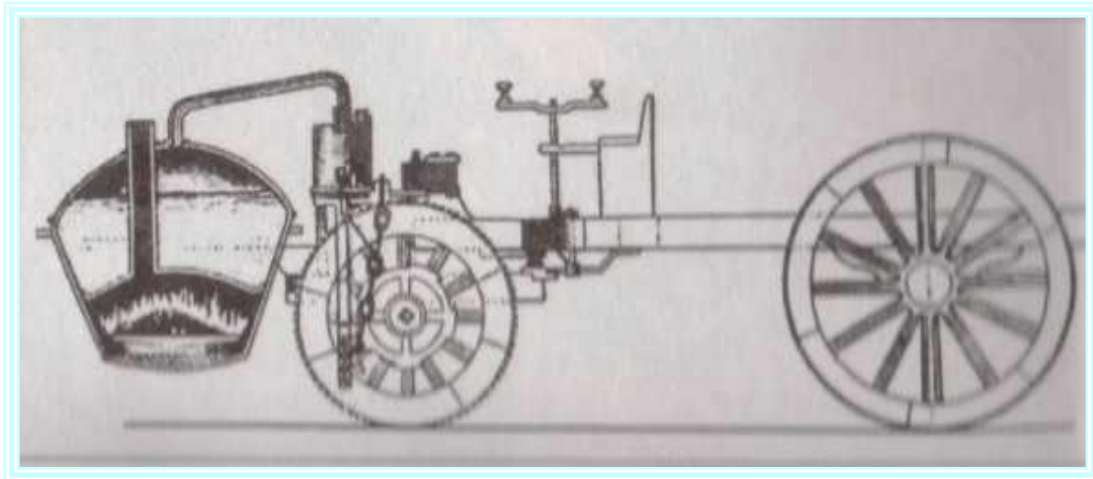
Steam cars: Drawing self-propelled wagons in the works of Isaac Newton (1663)



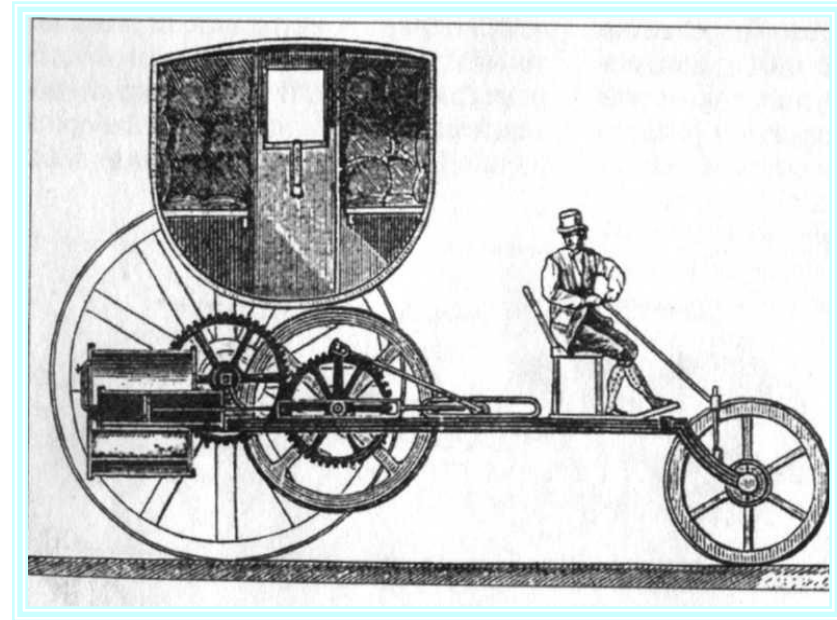
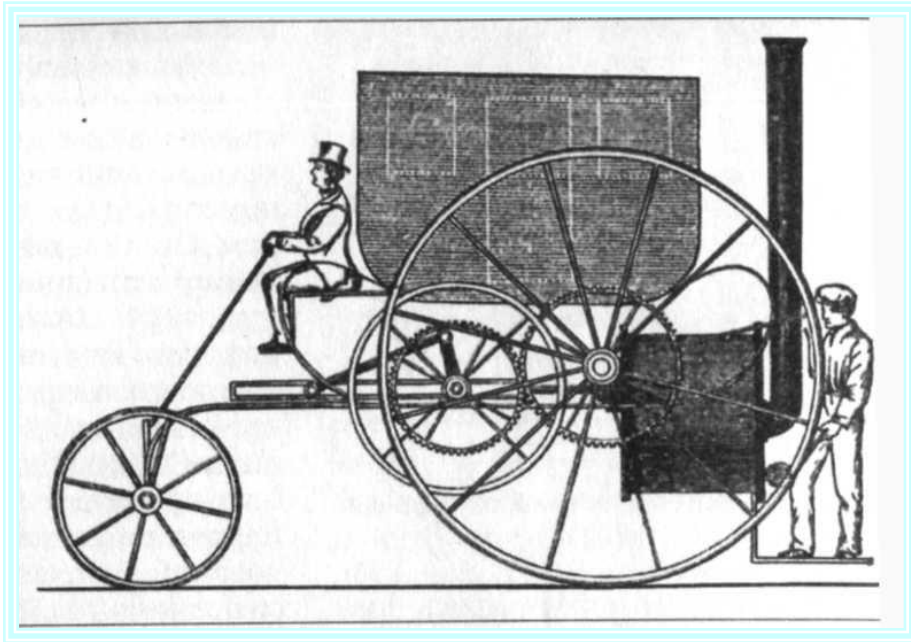
Steam wagon Murdoch



The first steam wagon J. Cugnot (1769) and the circuit pattern.

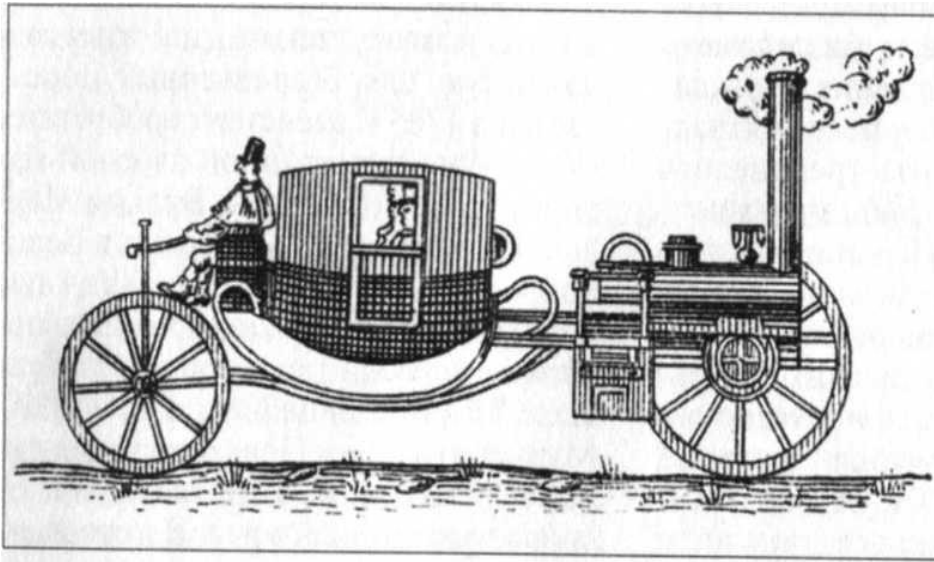


Three-wheeled steam carriages (Trevithick and Evans)

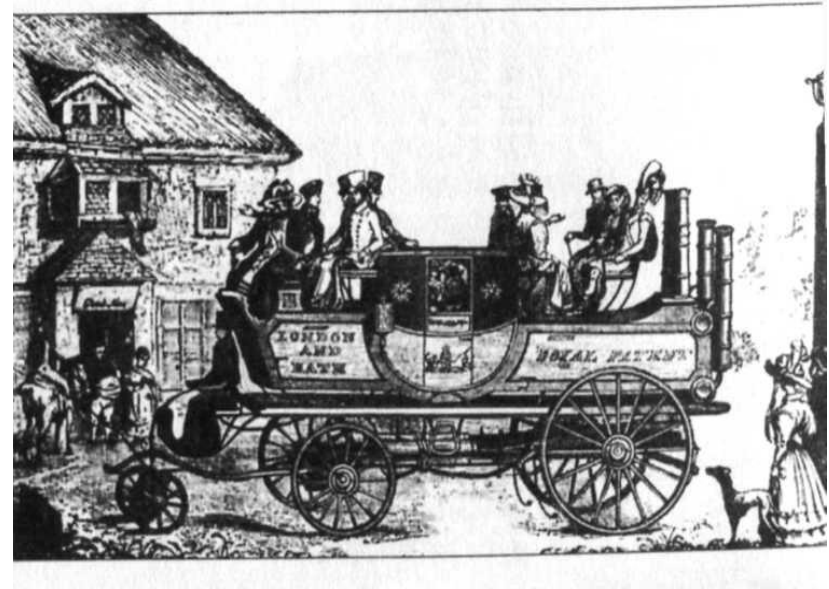


Steam crews.

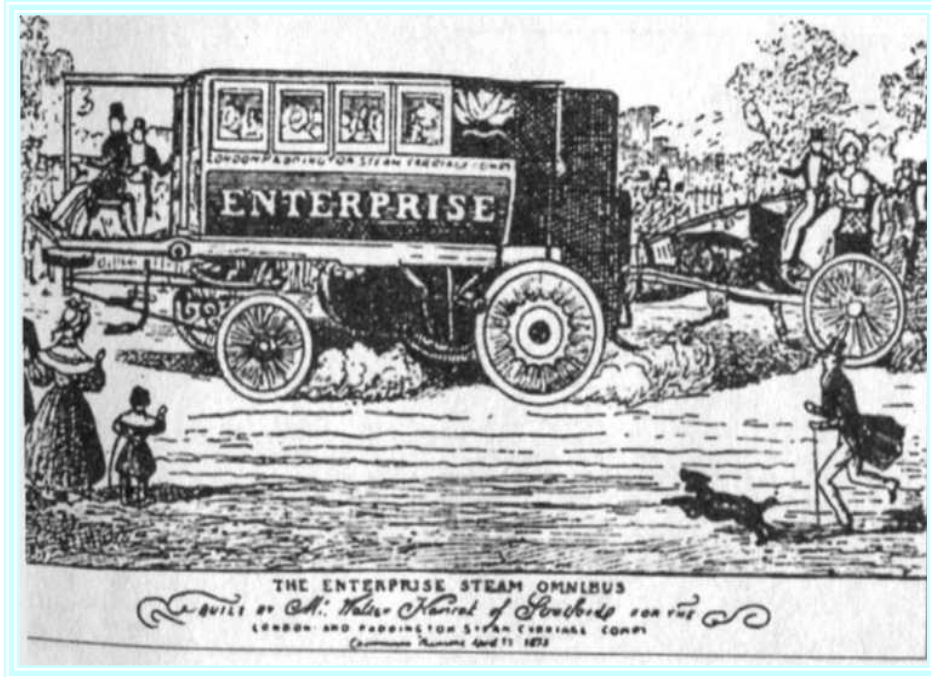
Steam crews.: Steam stagecoach brothers
Symington (1786)



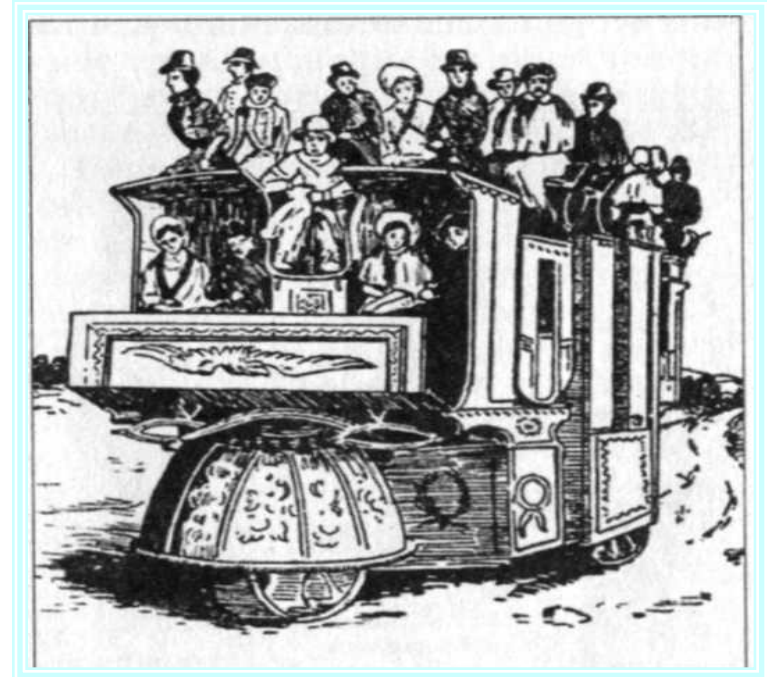
Steam Gurneya crew (1827)



Steam omnibus (bus)

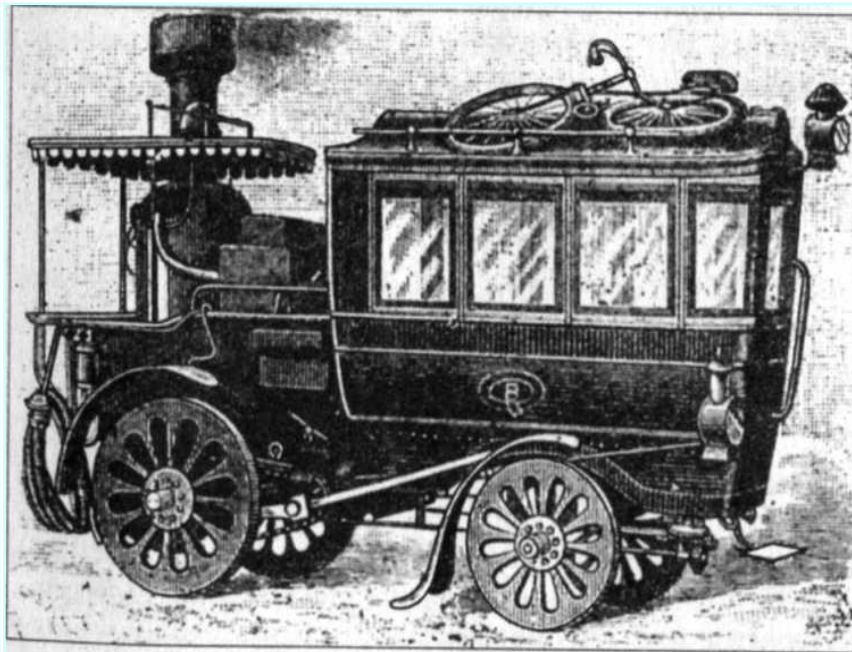


B. Hank "Enterprise" (1833)

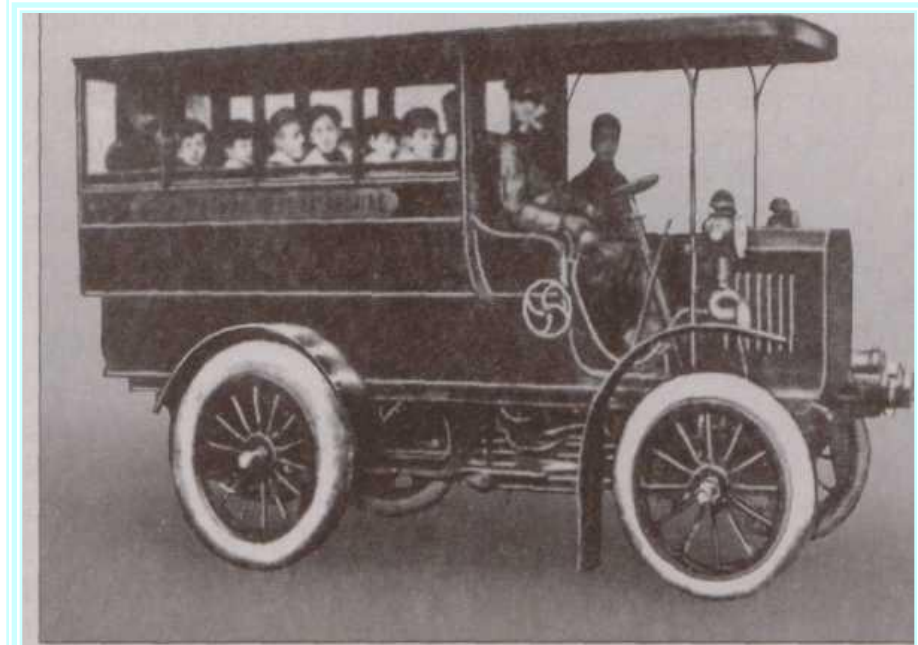


Car Church (1833)

Steam omnibus (bus)

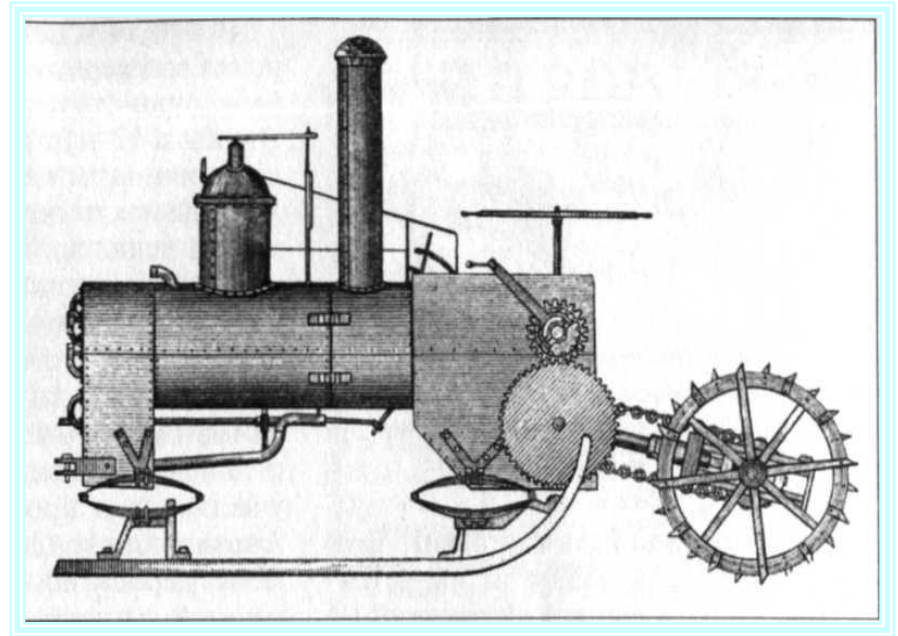
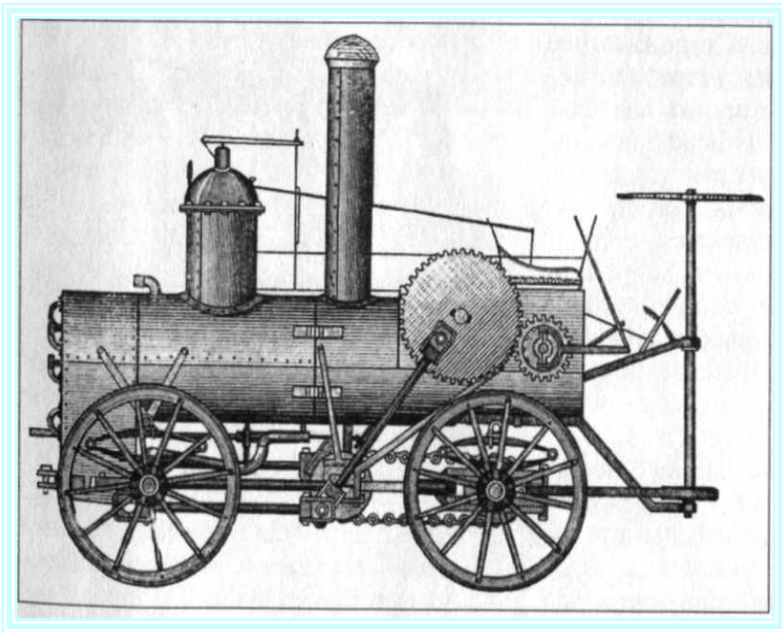


Six-omnibus Bolle



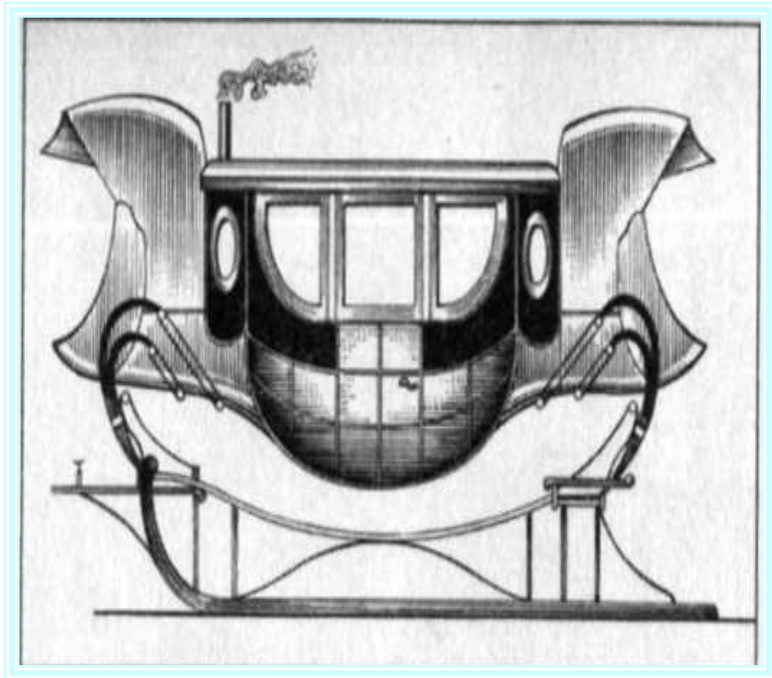
Omnibus Serpolle

Steam-terrain vehicles (creep)

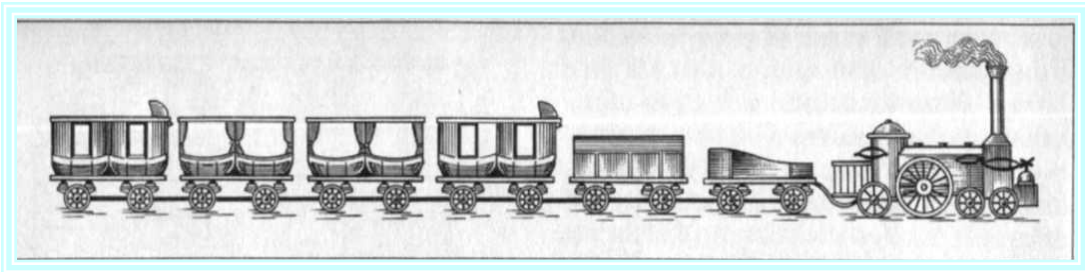


Comfortable Warm steam engine train wagon sleigh trackless steam train brothers

Warm sleigh wagon train



Trackless steam train brothers Dietz



Electric cars

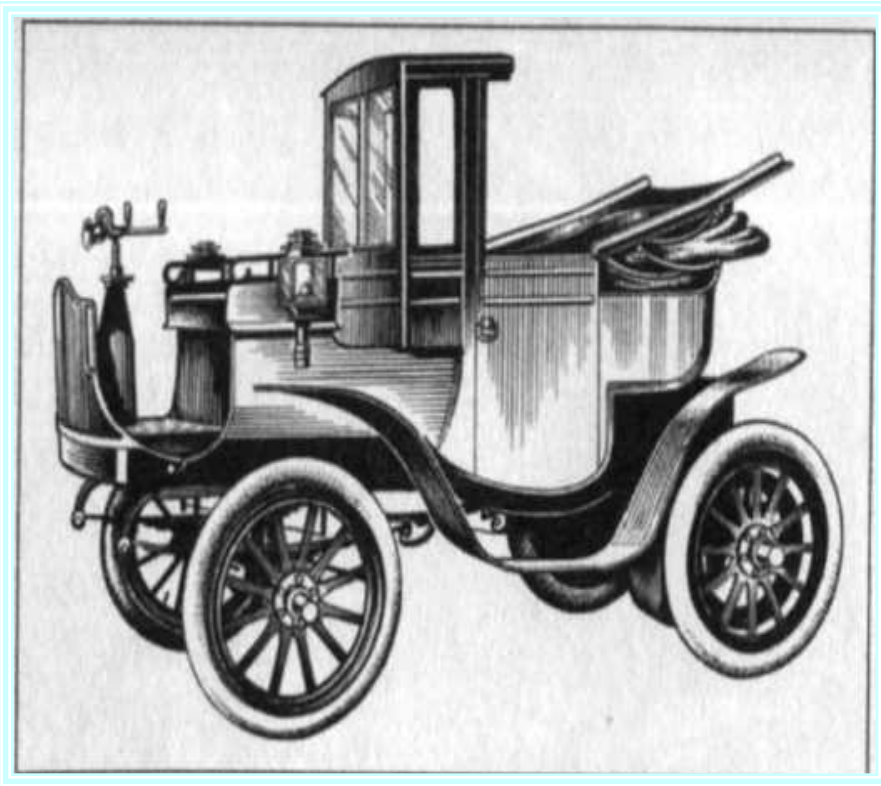
Before the advent of gasoline cars, along with paromobiley successfully developed and more independent direction - design and production of vehicles that use electricity as an energy source, accumulated in batteries.

Battery - This electrochemical cell, wherein the chemical composition of active element is almost entirely recovered by passing through a constant electric current.

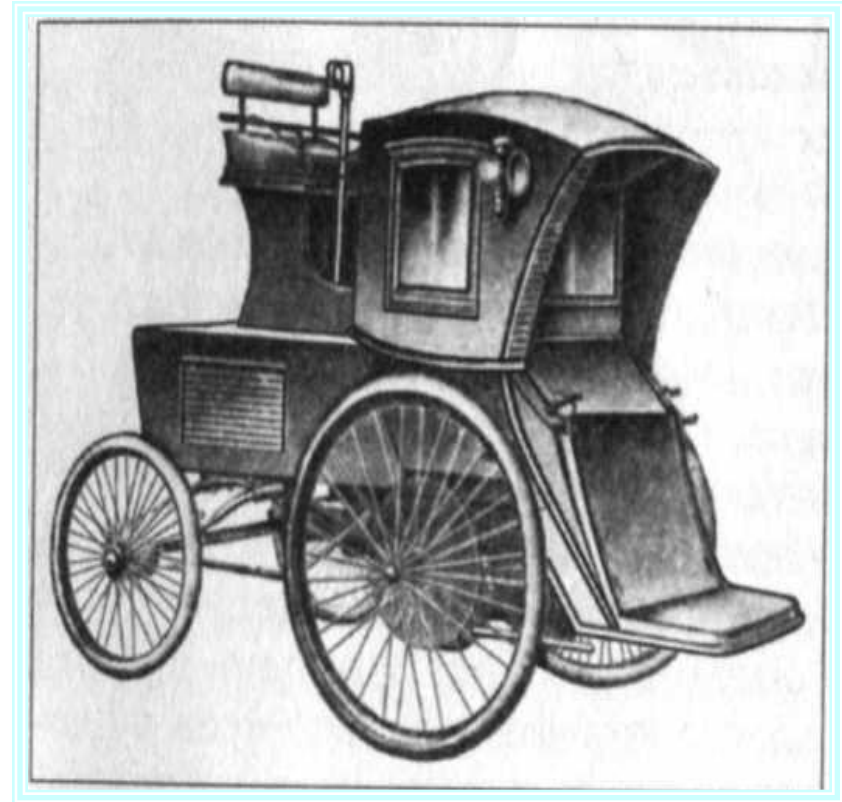
In 1859, Gaston Plante invented the first lead-acid battery.

The first electric cars

Electric "Gaul"

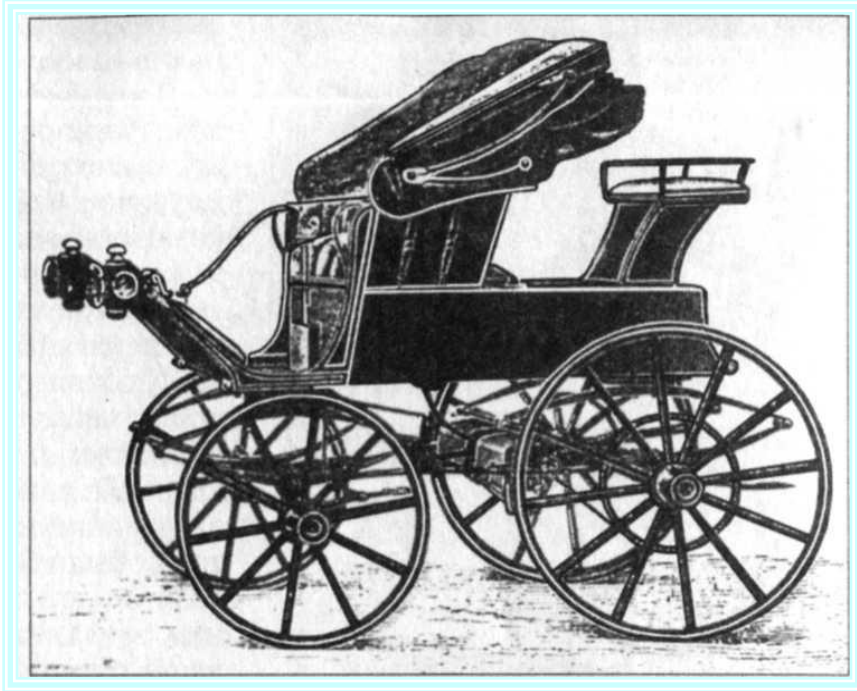


The first electric cars Electric "Gallia"
Electric - coupe

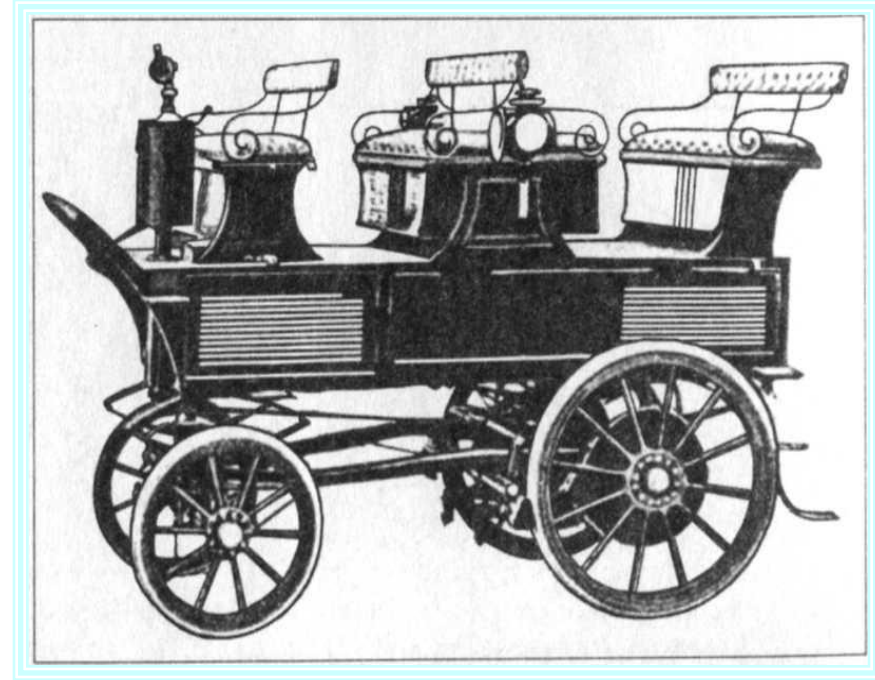


Electric crews

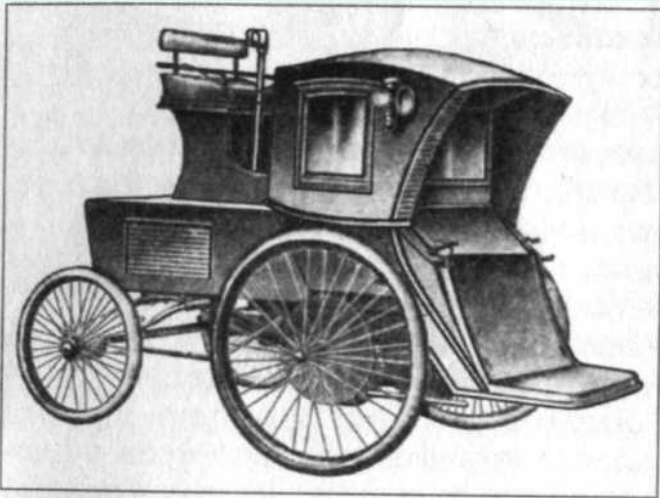
Electric crews Electric crew XIX
century US



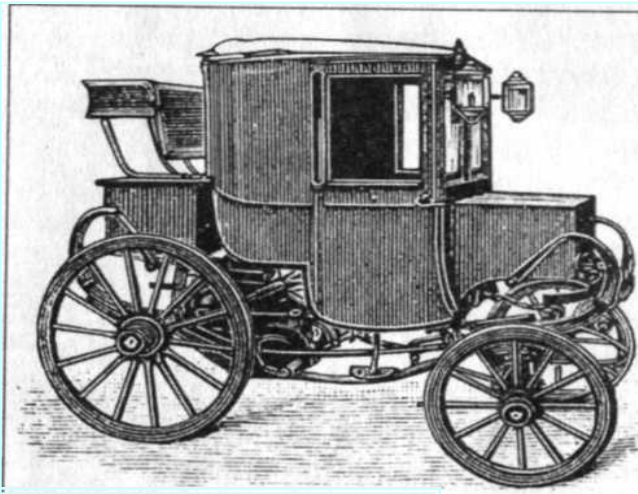
Public crew
12 seats



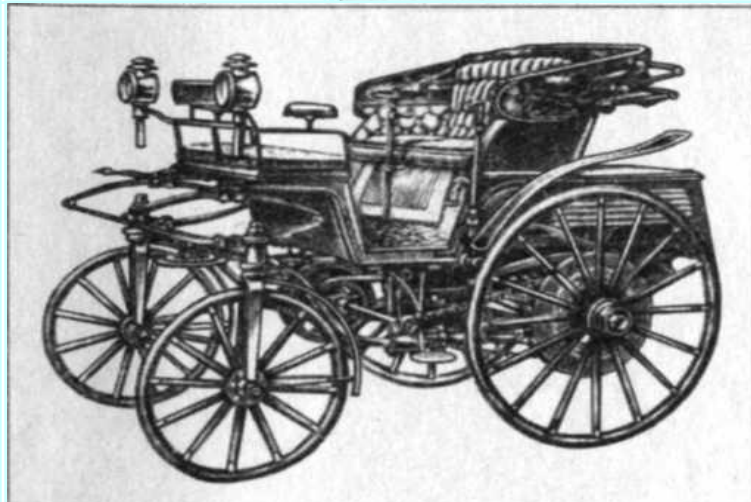
Electric cars



Electric - coupe



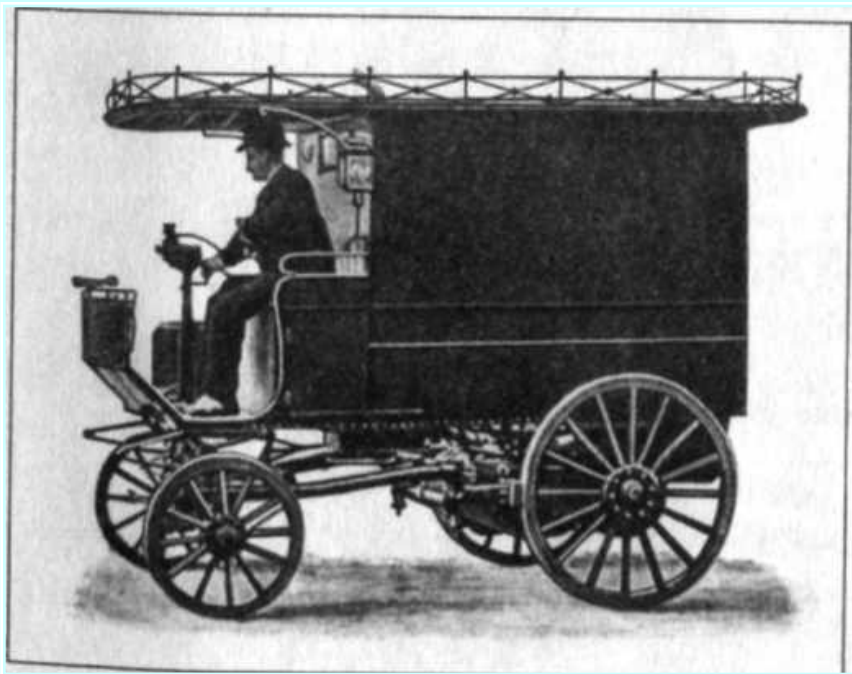
Electric
Crew
Structures
Fight



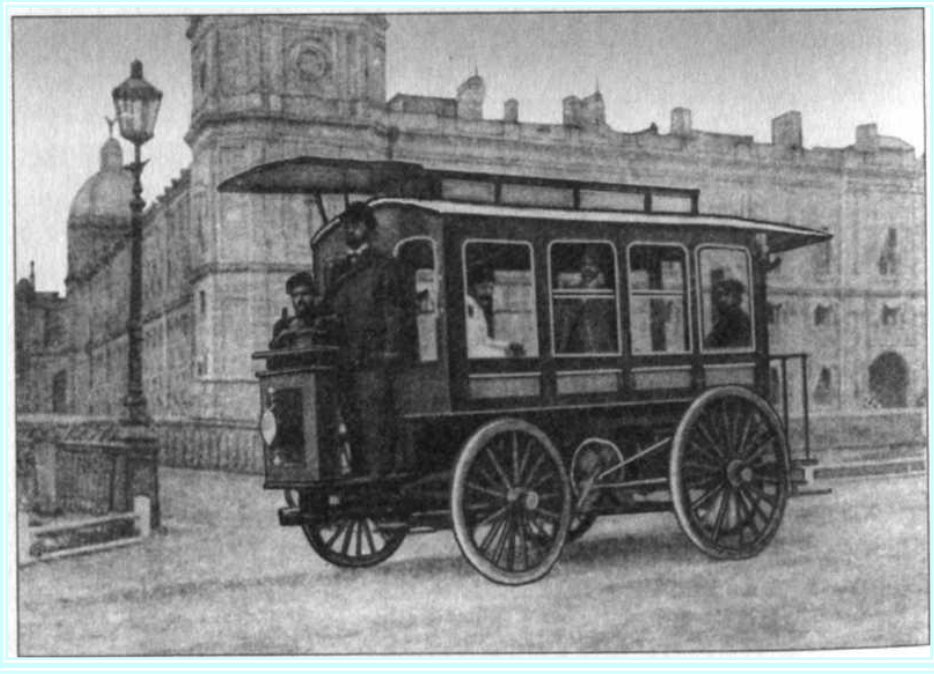
Electric
structure
Lucian

Public electric

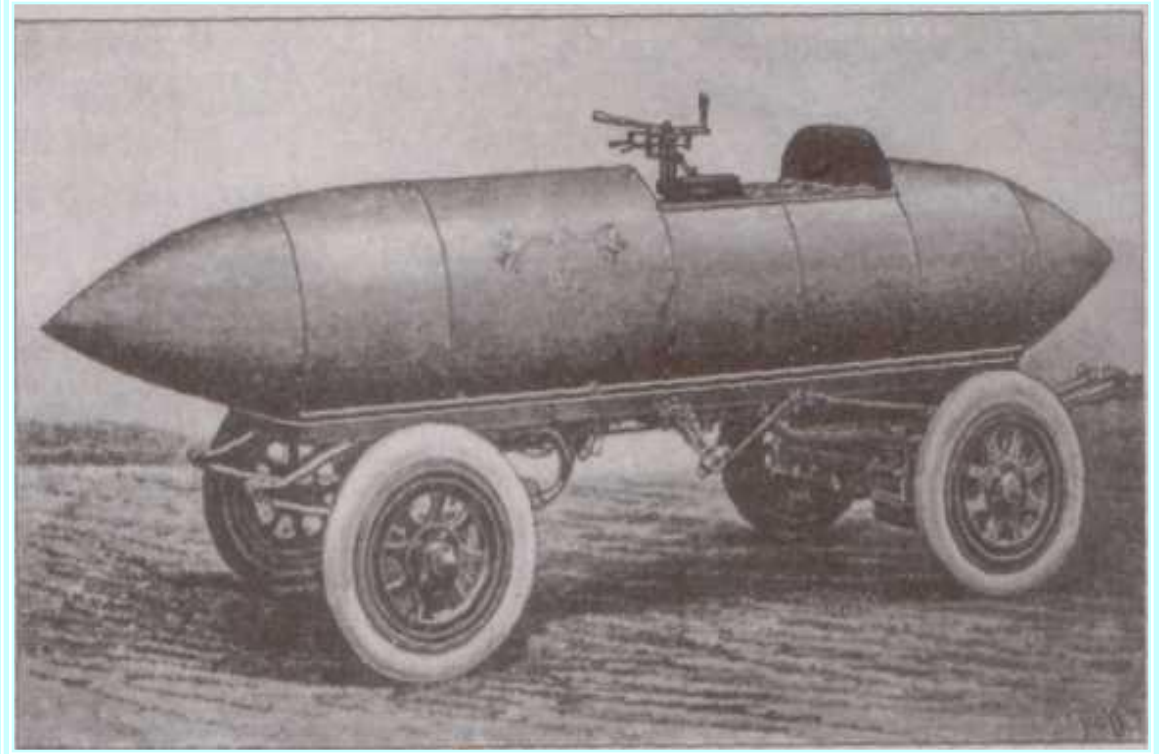
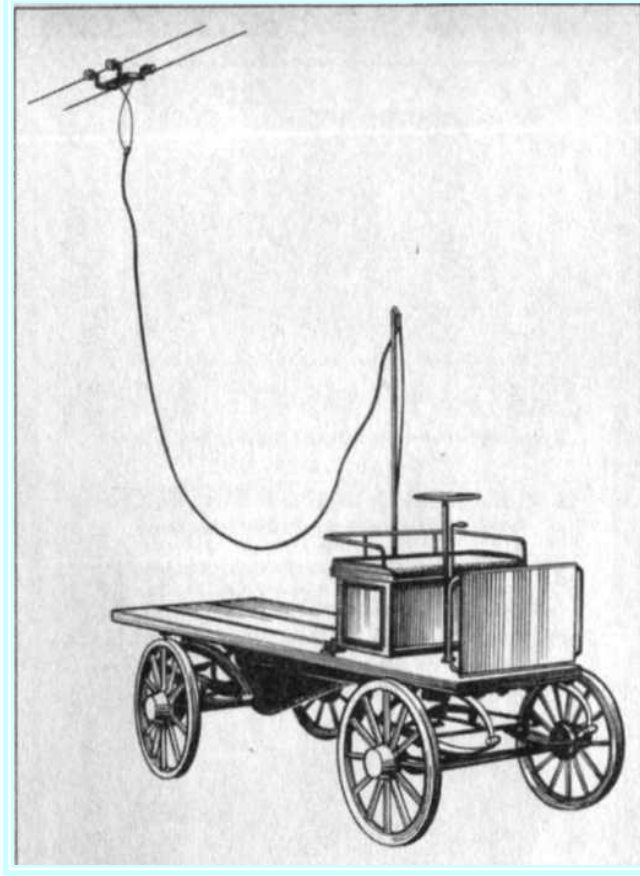
Electric Van



Elektrobuser
I.V.Romanova



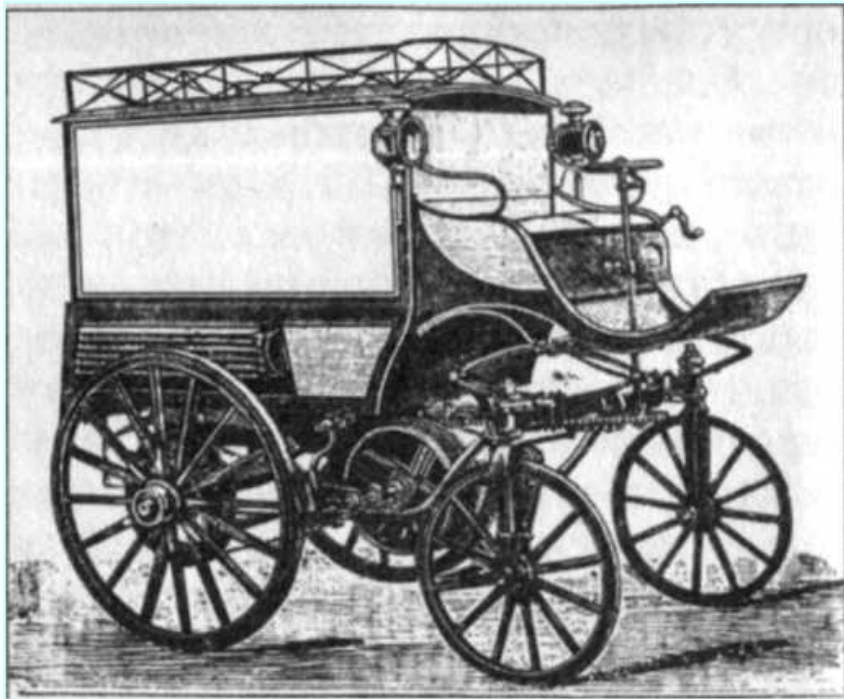
The first cargo trolley and electric racing car



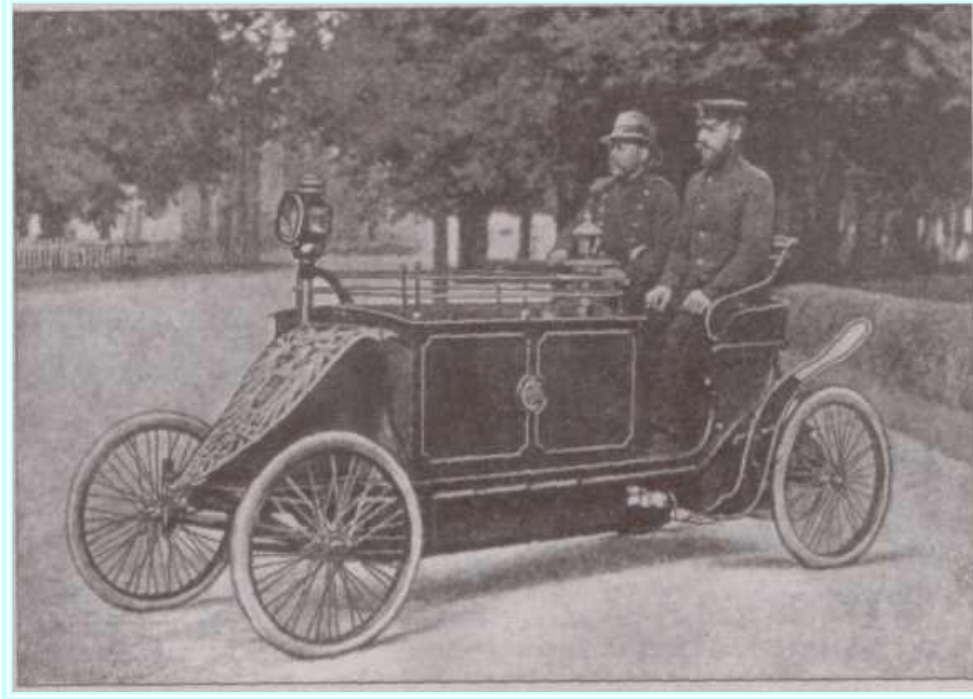
Racing car design Yenattsi

Industrial electric

Commodity van Lutsmana



Postal Vehicles

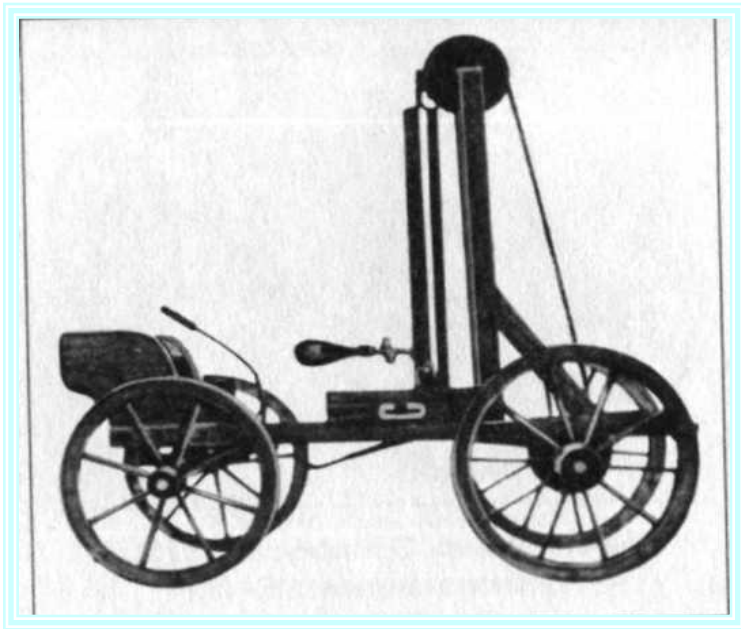


Cars with internal combustion engines

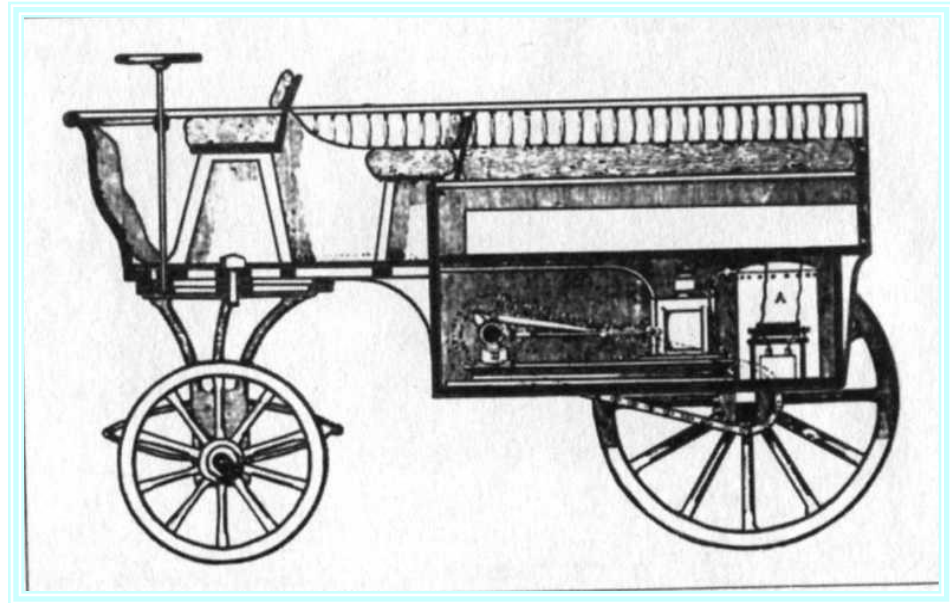
The simplest internal combustion engines are big gun, gun, gun. The projectile or bullet are in this case, an analogue of the piston, which is not returned. Therefore, the inventors of the first internal combustion engines have tried to build a gunpowder engines with the difference that they would ensure the return of the piston to its original position. Furthermore, it was necessary to make the engine such as to perform useful work, and in particular, it could be installed on a self-propelled carts. But the powder was not very suitable fuel for internal combustion engine, and therefore the first attempt to use it for this purpose soon ceased.

Gasoline engines

The first self-propelled vehicle with an internal combustion engine constructed in 1805 the Swiss Army Major Ivan de Reeves, received her patent in France



The first attempts to use petrol engines on the car should be referred to 1862, when French inventor Etienne Lenoir (1822-1900) established a private motor [конструкции на экипаже](#).



Current models

The car, driven by a pair of kerosene engines in 1861 made the Siegfried Marcus. Engines or "blasting machine" makes a lot of noise and the police banned them. But it was created workable vehicle.



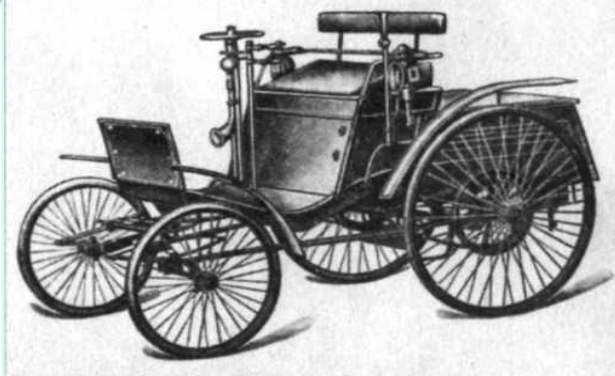
In our country the first internal combustion engine was built in 1884 at the Okhta shipyard St. Petersburg engineer OS Kostovich. This engine is not intended for use on self-propelled carriages, it was designed to be mounted on the airship. This engine is preserved to this day and is the showpiece of the Polytechnic Museum in Moscow.

Daimler Cars

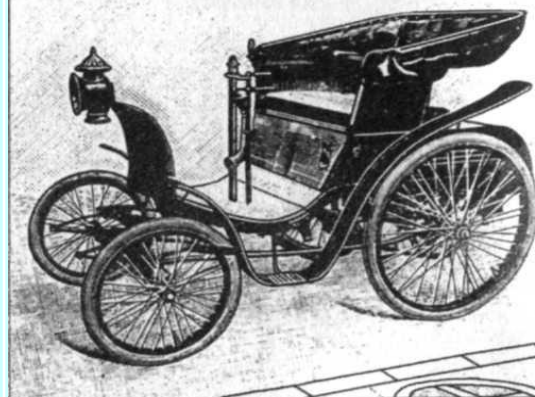
His first engines G. Daymleer created in the workshops of the factory "Deutz". First, in 1885, it was built by the horizontal and then vertical petrol engine. Then he began to build engines with V-arrangement of cylinders. V1878 was tested a two-stroke internal combustion engine, and in 1885 created a lightweight four-stroke internal combustion engine.



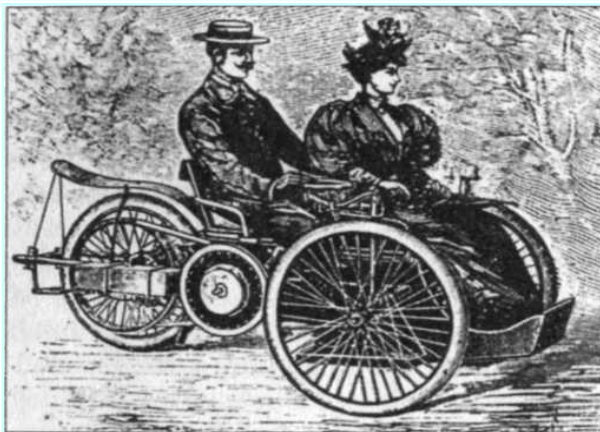
Cars with engines of Daimler



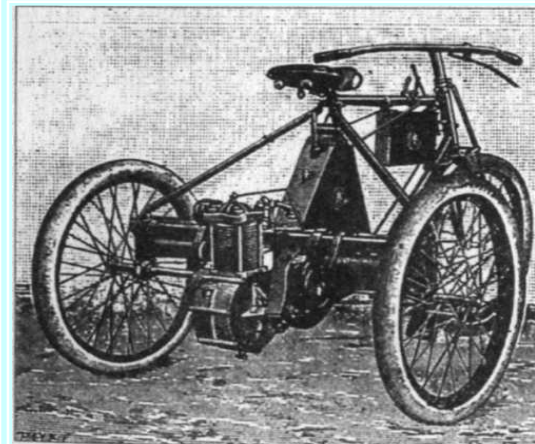
Автомобиль К. Бенца



Экипаж Ришара



Бензомобиль Л. Болле



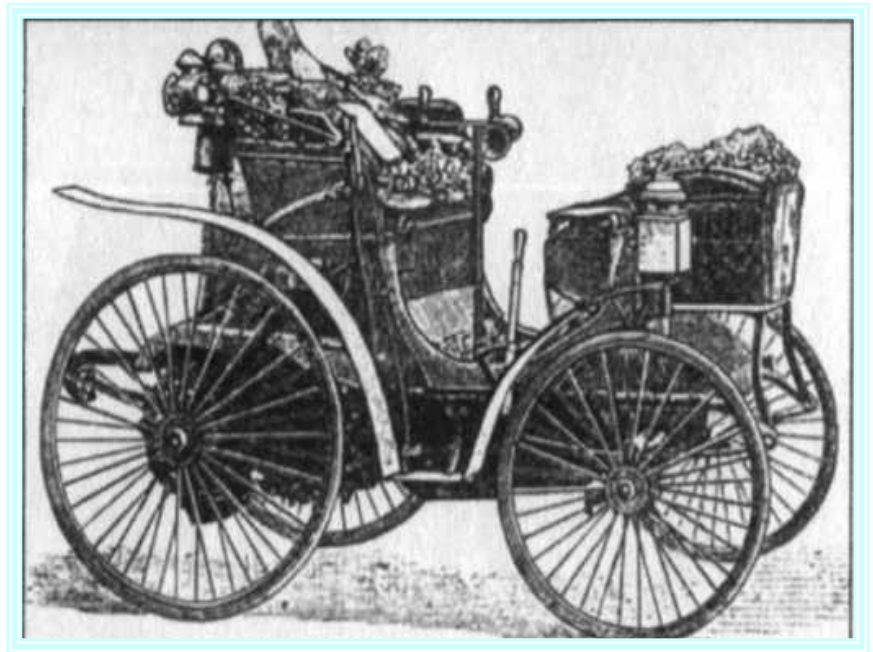
Трицикл де Диона и Бутона

Cars with engines of Daimler

Quintuple crew Panara and
Levassor



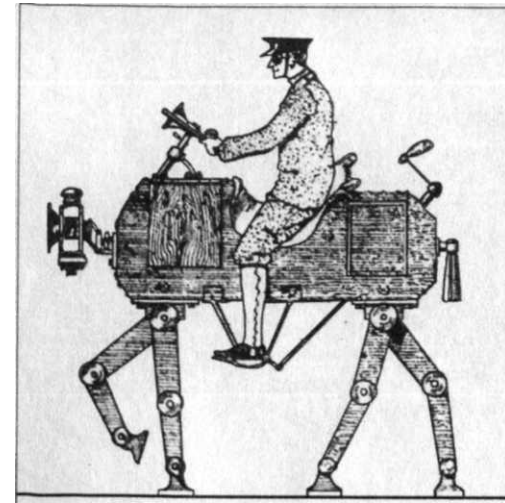
Double crew Peugeot



Technical curiosity

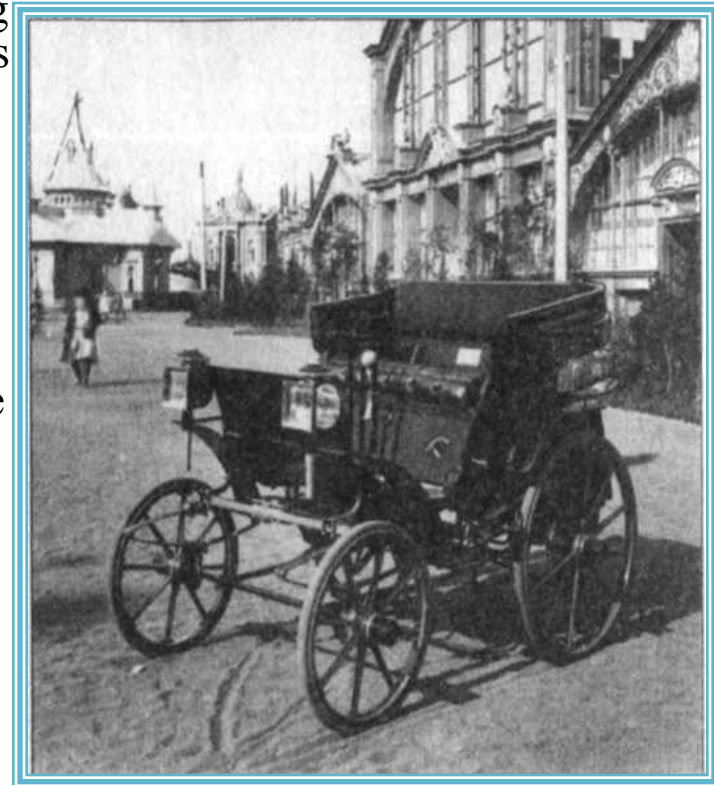
- In the journal "Scooter" in 1903 in his article "The greatest discovery of the twentieth century", describes "the car - horse"
- Oblong-round box made from sheet metal and holds the motor housing has the form of a horse. Above, on the back, a recess in which it is placed rider. Before he has a steering wheel, for him - a handle for blowing into play. Right and left lifting plates fastened, which are at the table can be raised. Rider sitting on a "horse", they can have lunch or expanded map. Lifting the board on the back, is used to open and review the internal machinery. For the exhaust system behind the exhaust pipe fastened. Front lights for illumination. The motor shaft by means of alternately drives the four legs. The mechanism is still a secret and hidden inventor of sheet metal strips. If, for example, you turn left, then using the steering wheel front feet turn slightly to the left and have to run in this direction, the back, on the contrary, turn right

«Car-horse "can go through any obstacle can move on wet soil. When necessary, you can increase the hoof, lower parts are provided with plastina- of which as needed can change. A ride on the "car-horse" easier to learn than the horse.



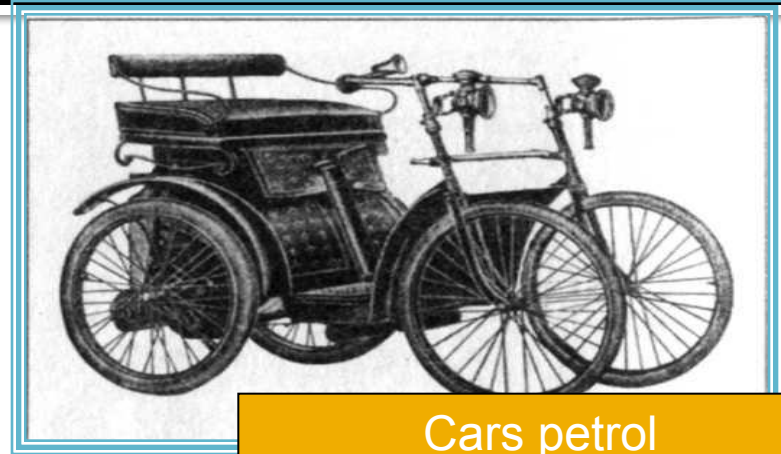
The first makers of domestic cars (1896)

Officially, the first domestic car makers considered EA Yakovlev and PA Frese. Yakovlev in 1889 in St. Petersburg organized the mass production of kerosene and gas engines in the construction of which he used electric ignition, removable cylinder head, the lubricant under pressure. These engines conform to world standards, and in 1893 they were awarded the prize at the World Exhibition in Chicago. In this exhibition, EA Yakovlev and PA Frese engineer intrigued exposure series production cars of the brand "Benz" have decided to unite and build a similar car. Three years later, the car was built. Yakovlev had made the engine and transmission, and Frese - the chassis and body. July 1, 1896 the first Russian car was introduced as an exhibit at the All-Russian industrial and artistic exhibition in Nizhny Novgorod, where he made a trip demonstration

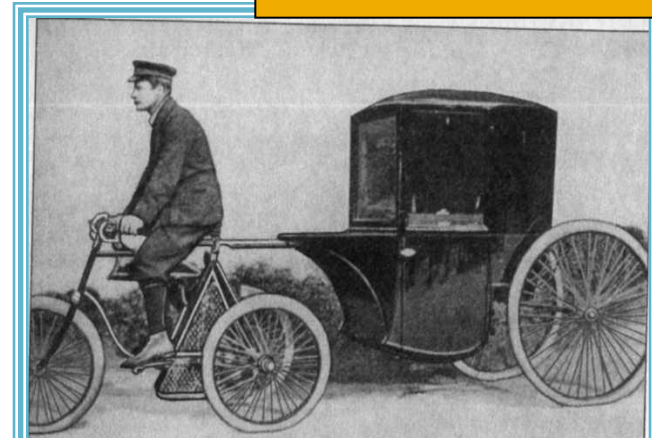


Cars Lutsk Grigoriy Borisovich outstanding Russian avtokonstruktora

G.B Lutsk in 1890 designed several internal combustion engines. They were the most advanced at that time. In 1899, the famous Russian motorist K.Ossovsky wrote: "The most favorable impression on the Berlin Exhibition produced crews, which is the builder B. Lutsk: Lutsk engines can be put on a par with the best benzinomotorami. In the development of all the structural parts of the car Lutsk has very few rivals. "



Cars petrol
BG crew Lutsk



Tricycle BG Lutsk with pritsepom- coupe
(1899)

BG Trucks Lutsk

Trading carriage
company "Daimler"



St. Petersburg, 1901



At the World Exhibition in Paris in 1900, freight
B.G.Lutskogo cars have been awarded silver medal