

Jacques Alexandre César Charles



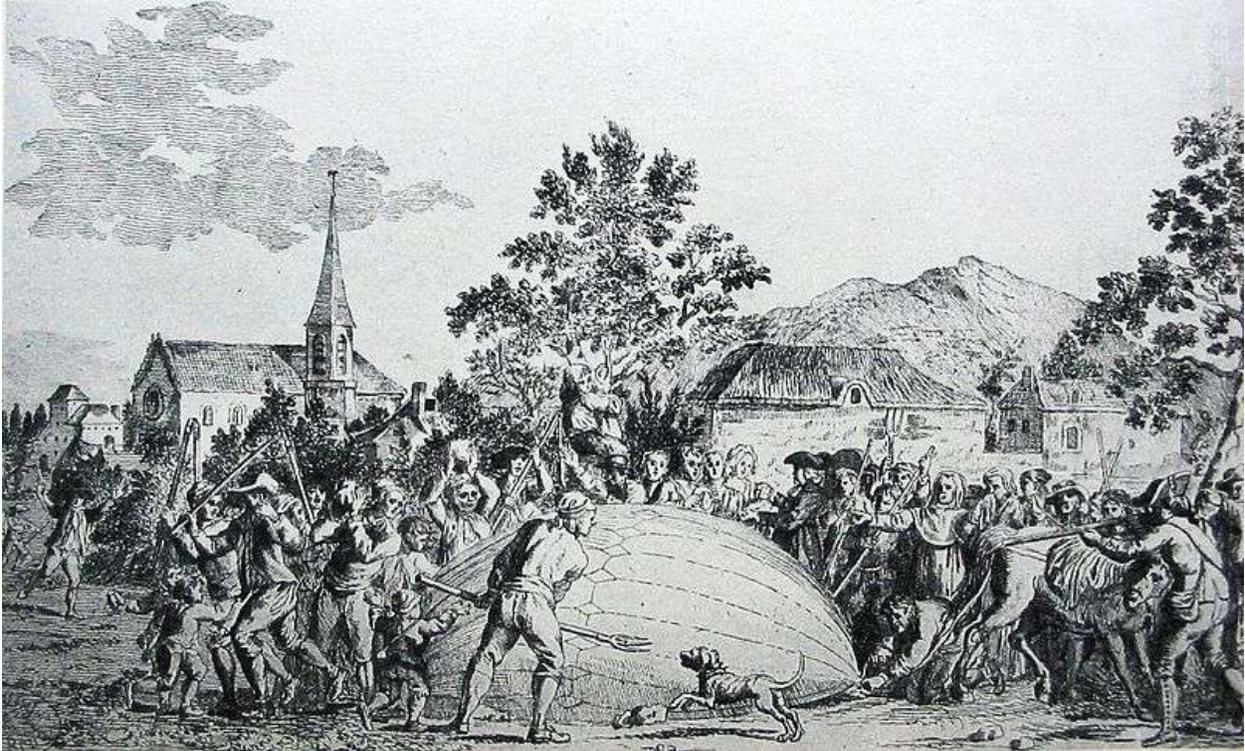
The first gas balloon was the perfect invention, because it had exquisite perfection from the very beginning. The story is this. As has been said, rumors of the Annonay experiment reached Paris with swiftness, but communication at the time lacked in precision. When the 37 year old professor Jacques Alexandre César Charles (1746-1823) was entrusted by the French Academy of Science with the duty to study the new invention, he could not fax for details. He sat down and pondered possible ways to build a balloon, and he came to the solution that a recent scientific discovery had been put to use.

Charles knew that in 1766 the British scientist Henry Cavendish had isolated a gas that was 14 times lighter than air. It had many names: Flammable air, flogiston and water gas. Later it was called hydrogen. Charles built the balloon together with Les Frères Robert, two French brothers. Anne-Jean Robert (1758–1820), and Nicolas-Louis Robert (1760–1820).

On August 27, 1783, Charles' first balloon - hardly four meters in diameter - gathered a big crowd of Parisians at the Champs de Mars (where the Eiffel Tower is today). The balloon was made of silk with a cover of rubber solution varnish to keep the hydrogen inside. The gas had been manufactured by pouring 225 kg of sulphuric acid over half a ton of scrap-iron. It was enough to lift 9 kg. A cannon shot signaled the take-off at 5 PM. The small balloon ascended and disappeared towards the north followed by horsemen.

One of the spectators was the American ambassador to France, Benjamin Franklin. When someone asked him of what possible use this new invention could be, the 77 year old Franklin replied with a classic line:

"And of what use is a new-born baby?"



The balloon built by Jacques Charles and the Robert brothers is attacked by terrified villagers in Gonesse.

After about 45 minutes the balloon descended into a field close to the little village of Gonesse (the Charles de Gaulle airport is a modern neighbor). It was here that the local farmers gave their famous display of the eternal human fright of new technology and strange phenomena. With pick axes and spades they attacked the monster that had tumbled down from the sky, inspired by the beast's behavior to sigh and groan and emit a horrible smell. The horsemen could only save some torn remains.