

Patenting of Dynamite by Industrialist Alfred Nobel

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Swedish industrialist, engineer, and inventor, Alfred Nobel built bridges and buildings in Stockholm. His construction work inspired Nobel to research new methods of blasting rock. In 1860, the inventor first started experimenting with nitroglycerine.

In 1863, Alfred Nobel invented the Nobel patent detonator or blasting cap for detonating nitroglycerin. The Nobel patent detonator used a strong shock rather than heat combustion to ignite the explosives. The Nobel Company built the first factory to manufacture nitroglycerin and dynamite.

Nitroglycerin and Dynamite

Nitroglycerin was first invented by Italian chemist Ascanio Sobrero in 1846. In its natural liquid state, nitroglycerin is very volatile. Alfred Nobel understood this and in 1866 he discovered that mixing nitroglycerine with silica would turn the liquid into a malleable paste, called dynamite. One advantage of dynamite over nitroglycerin was that it could be cylinder-shaped for insertion into the drilling holes used for mining.

Patenting of Dynamite

In 1867, Nobel received U.S. patent number 78,317 for his dynamite. To be able to detonate the dynamite rods, Nobel also improved his detonator (blasting cap) so that it could be ignited by lighting a fuse.

In 1875, Nobel invented blasting gelatine in Paris and patented it in 1876. In 1887, he was granted a French patent for blasting powder "ballistite".

Biography

On October 21, 1833 Alfred Nobel was born in Stockholm, Sweden. His family moved to St. Petersburg in Russia when he was nine years old. Nobel prided himself on the many countries he lived in during his lifetime and considered himself a world citizen.

In 1864, Alfred Nobel founded Nitroglycerin AB in Stockholm, Sweden. In 1865, he built the Alfred Nobel & Co. Factory in Krümmel near Hamburg, Germany. In 1866, he established the United States Blasting Oil Company in the U.S. In 1870, he established the Société général pour la fabrication de la dynamite in Paris, France.

When he died in 1896, Alfred Nobel left behind a nine million dollar endowment fund. The Nobel prize is awarded yearly to people whose work helps humanity. In total, Alfred Nobel held three hundred and fifty-five patents in the fields of electrochemistry, optics, biology, and physiology.