

127 STOCK FOOTAGE - BATTERY

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Battery operated devices power parts of the world - from flashlights to solar panels etc.

INVU EXPERT

Italy was an early player in helping to power the world.

INVU ANOTHER EXPERT

One of the first major innovations in generating electricity was the invention of the **world's first battery**.

128 ARCHIVE - FRANKENSTEIN

128

Classic films and depictions of Frankenstein's monster.

NARRATOR

The battery not only changed how we power the planet, it also created a whole new genre of story-telling. But first, the story of it's creation..

129 ARCHIVE - VOLTA & GALVANI

129

Volta and Galvani

INVU ANOTHER EXPERT

Most people credit Alessandro Volta with the innovation, but it was really both Volta and a man named Luigi Galvani.

Images of Galvani's work with lightning, animal electricity, nervous system, galvanizing.

NARRATOR

In the 1780's Galvani discovers what he calls "animal electricity".

INVU EXPERT

Galvani had been studying the nervous system of frogs. He discovers that when he connects the nerves of the frog to a metal wire and puts it out during a thunder storm, **the frog twitches**. He also discovers that the frog twitches when two different metals touch the frog at the same time.

NARRATOR

Galvani concludes that the frog must be producing electricity. But Volta thinks the frog is just a conduit for electricity.

130 ARCHIVE/GFX

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Volta's work, drawings of voltaic pile, finished product, GFX show layers of metals and conductor stacked.

INVU ANOTHER EXPERT

Volta tests his theory and constructs the **Voltaic Pile, the first battery.**

INVU EXPERT

Volta's battery was a series of alternating discs of zinc and copper with a piece of brine soaked cardboard between them. Volta had basically substituted frogs for wet cardboard, and we're thankful he did!

131 ARCHIVE - FRANKENSTEIN

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Galvanizing displays through Europe, cadavers come 'alive', notices in newspapers, drawings of **Frankenstein.**

INVU EXPERT

Using Galvani's methods, scientists and showmen started "Galvanizing" in the streets for a crude form of public entertainment.

INVU ANOTHER EXPERT

It's been said that an onlooker to one of these spectacles was a young **Mary Shelley.** Shortly after she wrote the classic Frankenstein.

INVU EXPERT

Mentions **birth of science fiction** writing at this time - first science fiction writer was a woman!

132 **BIG WORLD HIT:** STOCK FOOTAGE

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Batteries used in every day: car battery, remote controls, laptops, phones, etc.

INVU EXPERT

Discusses how Volta's battery changed the world.

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