**An Informative Series by Metacog Patent Research** 

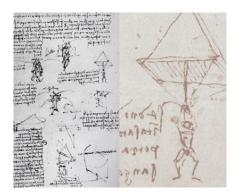




# **LEONARDO DA VINCI**

1452-1519

#### 1 Parachute



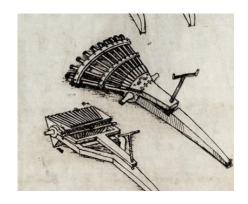
"If a man has a structure made out of coated cloth 12 arms wide and 12 tall, he will be able to throw himself from any great height without hurting himself." - Codex Atlanticus

#### 4 Diving Suite



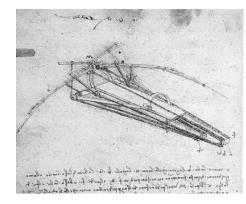
A jacket, pants and helmet with inbuilt glass goggles, and a breathing tube that supplied the air from the surface.

#### 2 Machine Gun



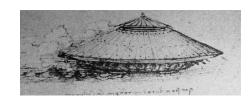
33-barreled-organ that allowed a set of 11 muskets to fire one after another.

#### 3 Ornithopter



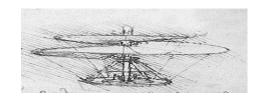
"Bird Wing". A bird-like structure that flaps its wings to generate lift and fly.

#### 5 Armored Car



A tank capable of moving in any direction and equipped with an array of cannons.

#### 6 Helical Air Screw



The helicopter-like device was made from reed, linen and wire, and was designed to compress air to obtain flight.





# **HEDY LAMARR**1914-2000

# **Spread Spectrum Technology**

A secret communication system that guides military weapons using a "frequency-hopping" technology.

US Patent 2,292,387





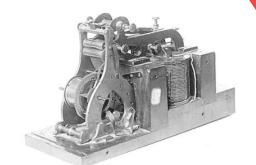


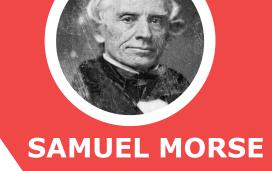


# **Electric Telegraph**

The device used electric pulses to transmit encoded messages over a wire. Morse's telegraph used a single wire and was a stark improvement as compared to the previously existing versions that were bulky and used over twenty-six electrical wires.

Trivia: The first official telegram sent by Morse read "What hath God wrought!"





**KNOW THY INVENTORS** 

1791-1872

#### US Patent 1647A

#### **Morse Code**

In the Morse code, each letter, number, and special character is assigned a series of dots and dashes. The letters which are more frequently used (example, E) are given shorter sequence of dots and dashes.

Trivia: The Morse code for SOS is  $(\cdots - - - \cdots)$  and was first used by the German government in 1905.



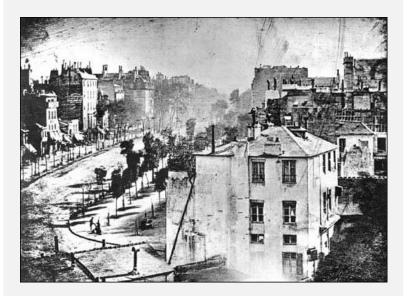
#### LOUIS DAGUERRE

1787-1851



# **KNOW THY INVENTORS**

First practical method of obtaining permanent images with a camera: **The Daguerreotype Process** 

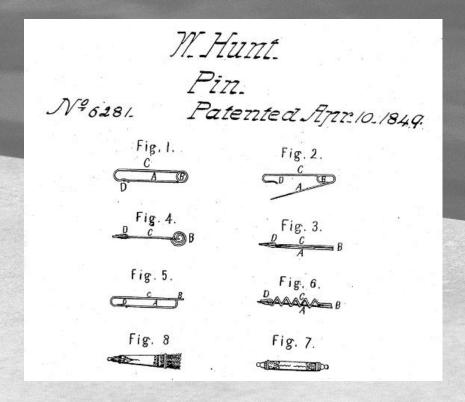


- ☐ Features the first human beings ever captured on camera
- ☐ Ten-minute exposure time

Louis Daguerre, Paris Boulevard, 1839

- 1. Polish a sheet of silver-plated copper until the surface is highly reflective (mirror surface).
- 2. Sensitize the plate by exposing it to iodine and bromine fumes.
- 3. Place the sensitized plate in to a camera and initiate exposure.
- 4. Treat the exposed plate with mercury vapours.
- 5. Fix the plate by bathing it with sodium thiosulphate to produce a single, positive image.





# **Safety Pin**

Made by twisting a piece of metal wire into a spring at one end and a clasp at the other end. The pointed end of the wire could then be forced into the clasp.

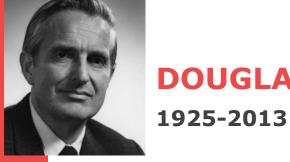


**WALTER HUNT** 1796-1859

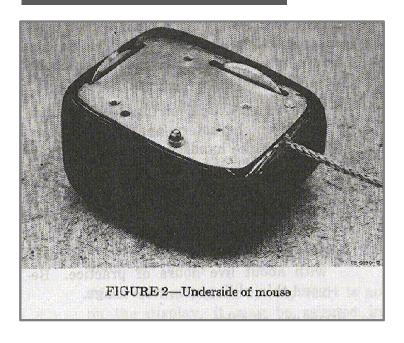




# DOUGLAS ENGELBART



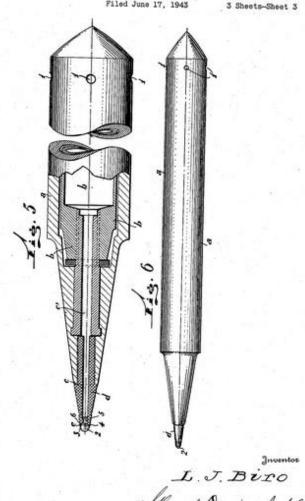
# **Computer Mouse**



A mouse with two wheels that produces two analog voltages. When the wheels rotate, there is a proportionate change to the X or Y movement over a table top. In addition, there are three buttons on top of the mouse for special control.



Dec. 11, 1945. 2,390,636 Filed June 17, 1943 3 Sheets-Sheet 3



#### **Ball Point Pen**

A combination of the quick-drying ink often used in newspaper printing and a ball socket mechanism (instead of a nib)

#### **US Patent 2390636A**

#### Claim 1

A writing instrument of the type comprising a reservoir for charging dense ink having an air-intake and a free ball tip located in a corresponding setting and fed through a single conduit derived from said reservoir, wherein said ball setting is constituted by channels provided in the Walls thereof and leading from said conduit to the sides of the setting socket, said channels being spaced so as to remain in alternate relation with bearing seats for said ball in said setting.



LÁSZLÓ BÍRÓ 1899-1985





WILLIS CARRIER

1876-1950

#### **Air-Conditioner**

Willis Carrier invented a conditioning system to control both temperature and humidity in pre-existing cooling systems. The system replaced steam with cold water flowing through heating coils and balanced the temperature of the coil surface with the rate of air flow. It worked by drawing in air through a filter, passing the air over coils filled with coolant, and then venting the newly cooled and dehumidified air back out.

He also developed the dewpoint control which is a method of regulating humidity by controlling the temperature of the spray-water in the conditioning system.

**US Patent 808897A** 





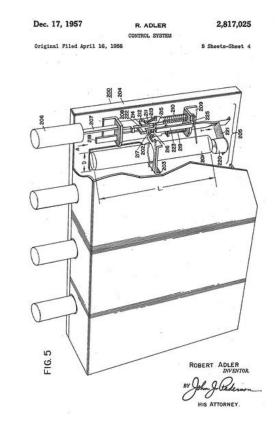
# ROBERT ADLER

1913-2007



# **KNOW THY INVENTORS**





#### **Remote Control**

Robert Adler developed a remote that communicated with the television set using ultrasound or sound waves. The remote had four buttons, one each for switch on/off, channel up, channel down, and sound on/off. When a button was pushed, it struck an aluminium bar which emitted a certain frequency. A TV set would receive this frequency and perform the required action.

**US Patent 2817025A** 



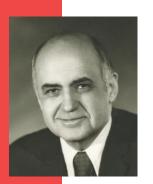
Dr. Maurice Hilleman has made remarkable contributions in vaccine development. The first vaccine he developed was against the Japanese Encephalitis (JE) virus, a viral brain infection spread by mosquitos.

He was also the first person to combine vaccines against more than one disease, specifically leading to the development of the MMR vaccine against measles, mumps, and rubella.

Some of his noteworthy patents include: US 3555149A, US 4459286, US 4215107

# **Vaccine Development**

Japanese Encephalitis	Meningitis
Chicken Pox	Measles
Hepatitis A	Mumps
Hepatitis B	Rubella



MAURICE HILLEMAN
1919-2005



# References

Leonardo da Vinci

https://bit.ly/2VkwCIHhttps://bit.ly/2xERXn2

Hedy Lamarr

https://bit.ly/2zdrMo4 https://bit.ly/34LPpzI

Samuel Morse

https://bit.ly/3bmFbsa https://bit.ly/2VEx43v

Louis Daguerre

https://bit.ly/2XOUhmk https://bit.ly/34RIUfK

Walter Hunt

http://tiny.cc/23cgnz http://tiny.cc/u4cgnz Douglas Engelbart

https://bit.ly/2VOJVAg https://bit.ly/2VIa97q

László Bíró

https://bit.ly/2x0LByd https://bit.ly/2XZy5WC

Willis Carrier

https://bit.ly/3eSgKoL https://bit.ly/2KtyA3d

Robert Adler

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Maurice Hilleman

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