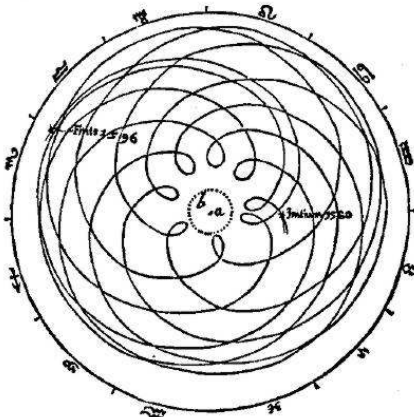


Johannes
KEPLER

DE MOTIB. STELLÆ MARTIS

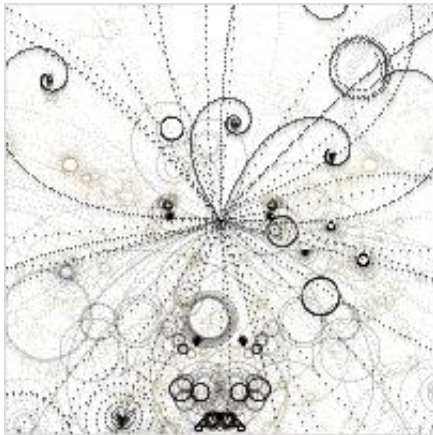


(GERMANY, 1571-1630) HIRED TO PROVIDE HOROSCOPES TO THE HOLY ROMAN EMPEROR, KEPLER USED HIS ACCESS TO THE IMPERIAL STAR CATALOG — TABULATED BY THE MAD ASTRONOMER TYCHO BRAHE — TO DEDUCE THE GEOMETRICAL PATHS OF THE PLANETS.

Kepler's diagram of the celestial motion of Mars

Albert

EINSTEIN

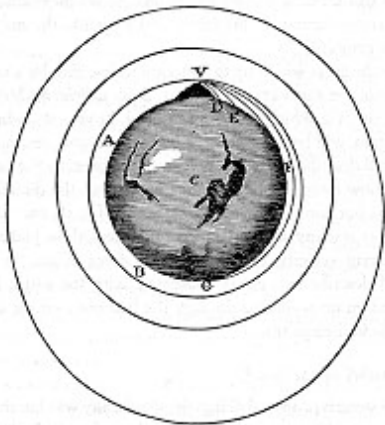


(GERMANY, 1879-1955) IN THE “MIRACLE YEAR” OF 1905, EINSTEIN PUBLISHED THE FOUR PAPERS ON RELATIVITY AND QUANTUM MECHANICS, WHICH WOULD SHAPE THE 20TH CENTURY WORLD. MOST FAMOUS WAS HIS INSIGHT INTO THE EQUIVALENCE OF ENERGY AND PHYSICAL MATTER; THAT IS, “ $E=MC^2$ ”.

Tracks of sub-atomic particles in a “bubble chamber”

Issac

NEWTON

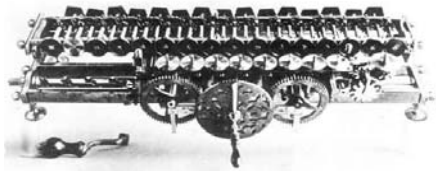


(ENGLAND, 1643-1727) BESIDES THE DISCOVERY OF GRAVITY AND THE LAWS OF MOTION — WHICH INCLUDED AN INVENTION OF CALCULUS — NEWTON REVOLUTIONIZED OPTICS AND WAS A NOTED PHILOSOPHER, THEOLOGICIAN & ALCHEMIST.

“NEWTON WAS NOT THE FIRST OF THE AGE OF REASON; HE WAS THE LAST OF THE MAGICIANS.”
-J.M. Keynes

Newton's sketch demonstrates "falling into orbit"

Gottfried
LEIBNIZ



(GERMANY, 1646-1716) AN INVENTOR OF MILLS AND STEAM ENGINES, LEIBNIZ EVEN BUILT A COMPUTER IN 1671. TRYING TO INVENT A LANGUAGE TO FEED PHILOSOPHY INTO HIS MACHINE, HE MADE GREAT ADVANCES IN LOGIC. HE WAS THE FIRST TO PUBLISH A THEORY OF CALCULUS, SETTING OFF A BITTER FEUD WITH NEWTON.

Leibniz's 1671 computer, the "Stepped Reckoner"

Nicolaus

COPERNICUS



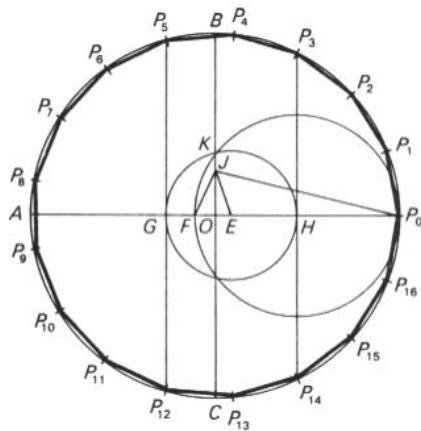
(POLAND, 1473-1543) PUBLISHED FROM HIS DEATHBED EVIDENCE THAT THE KNOWN UNIVERSE CENTERED ON THE SUN. WITH GALILEO, COPERNICUS CHAMPIONED FREEDOM OF THOUGHT & HELPED BRING THE END OF THE DARK AGES.

HE ALSO MAY HAVE INVENTED BUTTERED BREAD, DURING AN EXPERIMENT TO PROTECT SOLDIERS FROM THE PLAGUE.

Copernicus's diagram of the solar system

J. Carl Friedrich

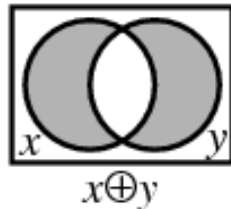
GAUSS



(GERMANY, 1777-1855) A BRILLIANT THEORIST, GAUSS SET THE STANDARD FOR MODERN GEOMETRY AND NUMBER THEORY. GAUSS ALSO DEVELOPED PRACTICAL “ENGINEERING MATH” SUCH AS LEAST-SQUARES ANALYSIS. HE GAINED POPULAR FAME FOR USING THESE STATISTICAL METHODS TO RE-LOCATE A “LOST PLANET,” THE ASTEROID, CERES.

Constructed heptadecagon - requested by Gauss on his tombstone

George **BOOLE**

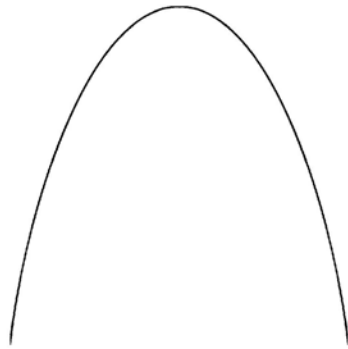


(ENGLAND, 1779-1848) HIS TRANSLATION OF THE ANCIENT STUDY OF FORMAL LOGIC INTO A MATHEMATICAL LANGUAGE — ONES AND ZEROS — WAS LONG CONSIDERED A CURIOSITY. RE-DISCOVERED 100 YEARS LATER BY YOUNG ENGINEER CLAUDE SHANNON DURING AN ELECTIVE PHILOSOPHY COURSE, “BOOLEAN” LOGIC IS NOW THE BASIS FOR DIGITAL COMPUTING.

Representation of a digital logic gate

Claude
SHANNON

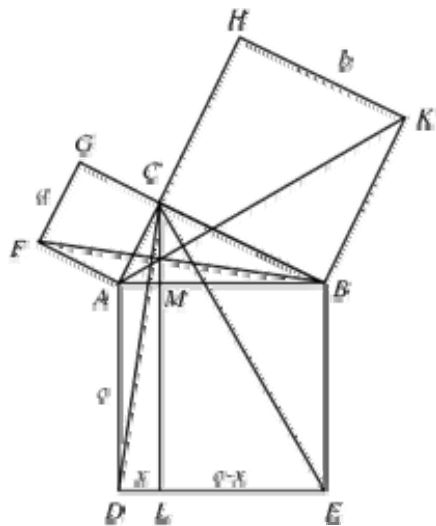
(USA 1916-2001), THE LEADING PIONEER OF THE DIGITAL AGE, SHANNON DEVELOPED THE METHODS TO ENCODE INFORMATION IN DIGITAL SIGNALS. HE ALSO APPLIED THIS NEW FIELD OF “INFORMATION THEORY” TO HIS HOBBIES, DESIGNING A LEARNING ROBOT MOUSE & THE FIRST CHESS PLAYING COMPUTER — AND MAKING A SMALL FORTUNE IN VEGAS.



The binary entropy function

PYTHAGORAS

of Samos



(GREECE, c.500 BC), THE FIRST MAN TO CALL HIMSELF A “PHILOSOPHER,” OR LOVER OF WISDOM, AND A ROLE MODEL TO PLATO AND ARISTOTLE. PYTHAGORAS’ CULT OF MATHEMATICIANS DEDICATED THEMSELVES TO UNDERSTANDING THE ROLE OF HARMONY IN RELIGION, MUSIC, AND SCIENCE.

Geometrical proof of the Pythagorean theorem

Thomas
EDISON

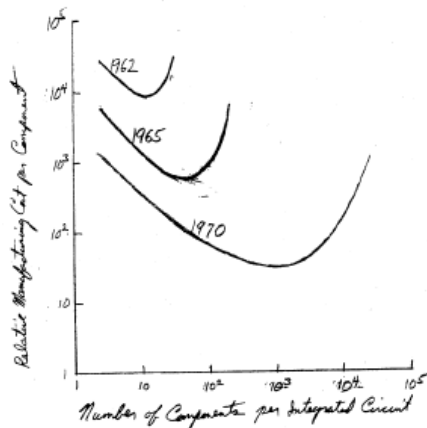


(USA, 1847-1931), FOUNDED THE FIRST INDUSTRIAL RESEARCH LAB, MENLO PARK, BY REINVESTING PROFITS FROM THE STOCK-TICKER, PHONOGRAPH, MOVING PICTURES, AND THE ELECTRIC LAMP.

EDISON POPULARIZED “HELLO” AS THE STANDARD PHONE GREETING — OVERRIDING BELL’S PREFERRED “AHOY-HOY.”

Diagram from Edison's patent for an electric lamp

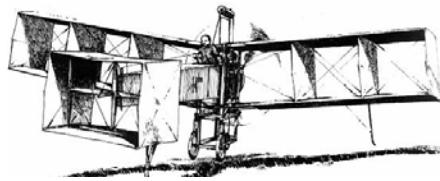
Gordon **MOORE**



(USA, 1929-), AN INTEGRATED CIRCUIT GURU, MOORE IS BEST KNOWN FOR HIS 1965 OBSERVATION THAT THE NUMBER OF COMPONENTS ON A CHIP DOUBLES EVERY TWO YEARS. “MOORE’S LAW” HAS BECOME A SELF-FULFILLING PROPHECY; COMPUTERS HAVE SINCE CONTINUED TO IMPROVE 1% PER WEEK FOR A HALF-CENTURY.

Early sketch of the “Law” from Moore’s notes

Orville & Wilbur
WRIGHT



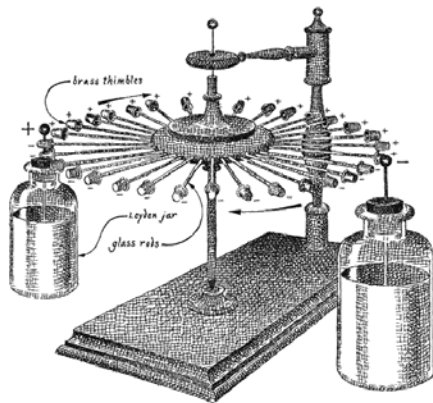
(USA), SUCCEEDING WHERE MILLENNIA OF INVENTORS AND DREAMERS HAD FAILED, THE WRIGHTS — AFTER CAREFUL TESTING IN A HOMEMADE WIND TUNNEL — FLEW THE FIRST PRACTICAL AIRPLANE IN 1903.

"AVIATION IS PROOF THAT GIVEN THE WILL; WE CAN DO THE IMPOSSIBLE." *-E. Rickenbacker*

Illustration of a Wright Flyer

-EXTRAS-

Benjamin
FRANKLIN

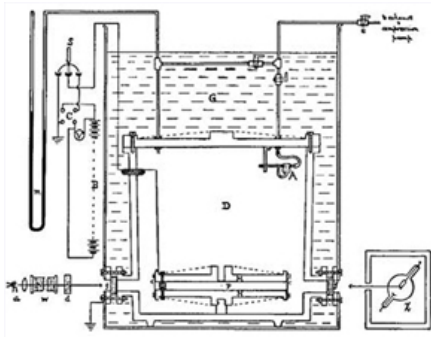


FIRSTNAME LASTNAME (BORN-DIED), DID A
BUNCH OF THINGS THAT WE'LL WRITE IN
THIS BOX

Franklin's electrostatic motor

Robert

MILLIKAN



FIRSTNAME LASTNAME (BORN-DIED), DID A
BUNCH OF THINGS THAT WE'LL WRITE IN
THIS BOX

a historical drawing or figure