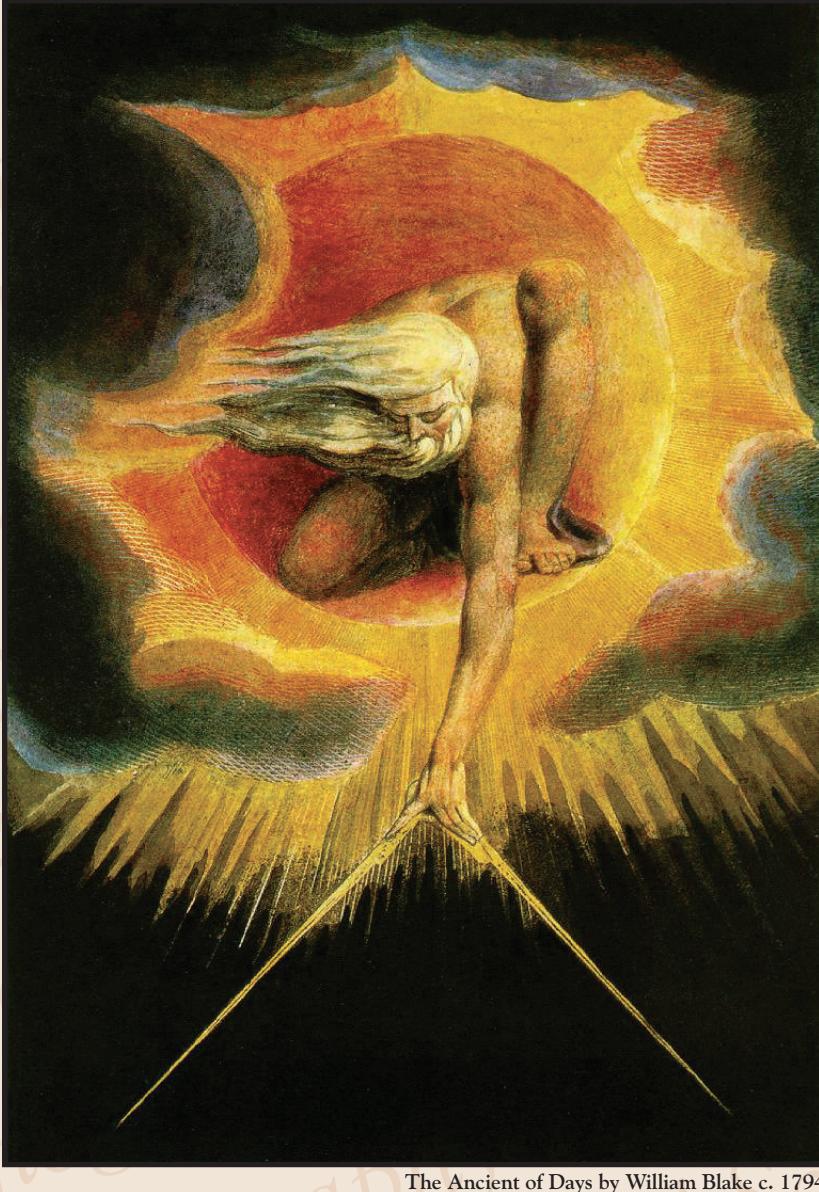


# Divine Invention

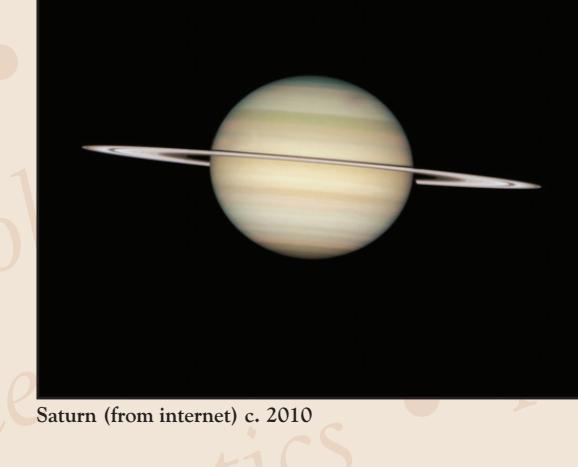
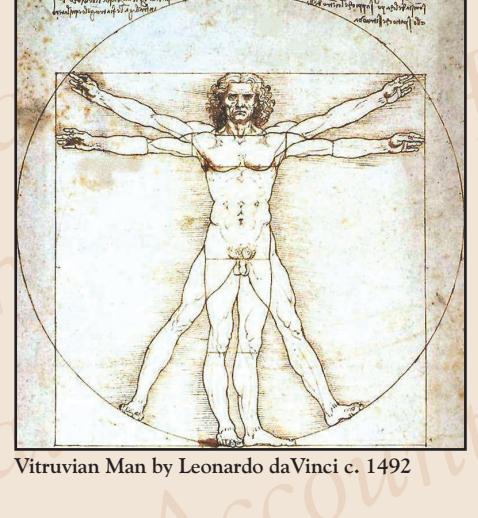
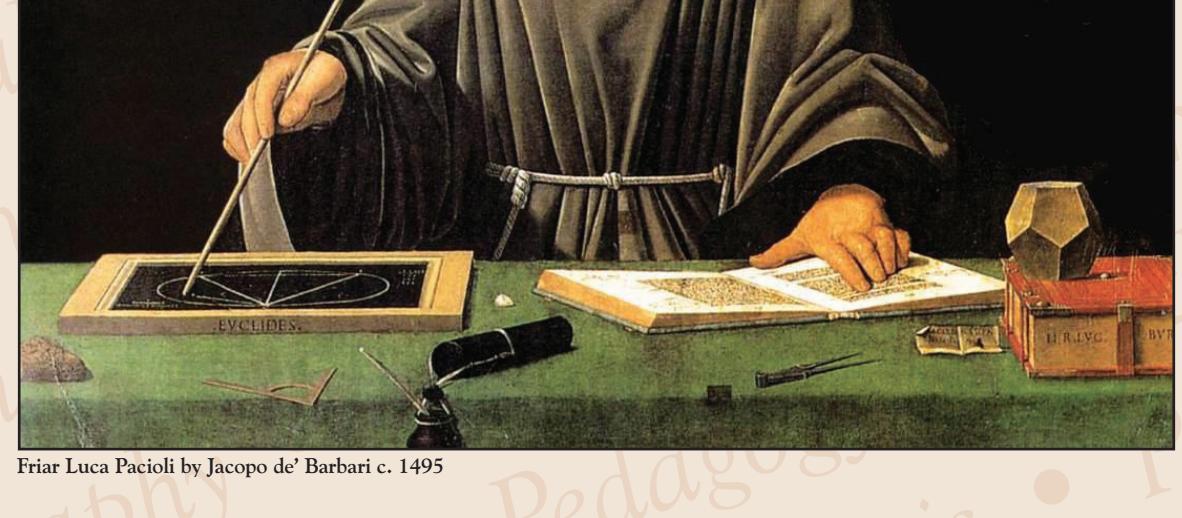
## Scientific Contributions to Civilization of Clergy and Religious



The Ancient of Days by William Blake c. 1794

Since the dawn of time, the Holy Man or Priest was regarded as the wisest and most valuable member of society. He healed the sick, educated the young, advocated for the weak, charted the calendar, counseled the ruler, and interceded with the gods. But the priest was also a leading figure in the formulation of laws, in the experimentation of agriculture, husbandry, water transport and the rotation of crops; in the development of mathematics, in the composition and advancement of music, and in the construction of bridges, roads, canals, private homes, palaces and temples. The advent of Christianity further channeled the priest's influence in countless ways with the help of even more consecrated advocates; monks and nuns, religious brothers and sisters. Virtually no human enterprise was left untouched. Thus the Catholic Church laid a firm foundation of selfless and lasting achievement.

	Inventor of the Carolingian Minuscule (lower case lettering and spacing)	Alcuin of York, English Benedictine
	Inventors of the Eastern European Alphabet (Cyrillic alphabet)	Cyril and Methodius, Greek monks, +828
	Father of the Mechanical Clock	Pope Sylvester II, French Benedictine
	Father of Music Notation	Guido of Arezzo, Italian Benedictine
	Conceived concept of a "Punishment fitting the Crime"	Anselm of Canterbury, French-English Benedictine
	Father of Canon Law (his use of logic and dialectics was also foundational for civil law)	Gratian, Italian Benedictine
	Father of Scientific Experimentation	Robert Grossteste, English Bishop of Lincoln
	Among the earliest diagnoses of Depression and other Mental Illnesses	Bartholomeus Anglicus, English Franciscan
	Father of Modern Science	Roger Bacon, English Franciscan
	First correct geometrical analysis of the Rainbow	Theodoric of Freiberg, German Dominican
	Greatest Traveler of Middle Ages (primary Far East resource)	Odoric of Pordenone, Italian Franciscan
	Father of Trigonometry / Inventor of the Astronomical Clock	Richard of Wallingford, English Benedictine
	Greatly contributed to the Mean Speed Theorem (determining velocity of objects in relation to each other)	Thomas Bradwardine, English Diocesan
	Father of Modern Monetary Theory	Jean Buridan, French Diocesan
	Father of Monetary Economics	Nicholas Oresme, French Diocesan
	First to conjecture that the earth revolves around the sun	Nicolas de Cusa, German Diocesan
	Father of Modern Banking	Barnabas of Terni, Italian Observant Franciscan
	Father of Modern Accounting	Luca Pacioli, Italian Conventual Franciscan
	Cartographer, first recorded usage of the word "America"	Martin Waldseemüller, German Diocesan
	Father of Modern Astronomy	Nicholas Copernicus, Polish Canon of Frombork Cathedral
	Father of International Law	Francisco de Vitoria, Spanish Dominican
	Father of the Modern Calendar (Gregorian)	Pope Gregory XIII, Italian Diocesan, +1585, with Christopher Clavius, German Jesuit
	Noted for observations re magnetic variation of the compass / First to determine longitude at sea	Christopher Borrus, Italian Jesuit, then Cistercian
	Inventor of the Equatorial Mount (compensating for earth's rotation to maintain sighting on celestial objects)	Christopher Grienberger, Austrian Jesuit
	Pioneers in Hydromechanics (calculations regarding fluids in motion)	Benedetto Castelli, Italian Benedictine
	Fundamental Reformer of Surgery/Treatment of Wounds	Cesare Magati, Italian Capuchin Franciscan
	First to discover that the planet Mercury had orbital phases	Giovanni Battista Zupi, Italian Jesuit
	First to determine center of gravity of the sector of a circle (relating to flying objects)	Jean-Charles de la Faille, Dutch Jesuit
	Wrote extensively on Comets	Johann Baptist Cysat, Swiss Jesuit
	Laid groundwork for the discovery of Calculus (study of change, i.e. limits, derivatives, infinite series, etc.)	André Tacquet, Belgian Jesuit
	Inventor of the Terrestrial Telescope (i.e., spyglass)	Antonius Schyrlaus (Schyril), Austrian Capuchin Franciscan
	Discovered Diffraction of Light (phenomena occurring when a wave encounters an obstacle)	Francesco Maria Grimaldi, Italian Jesuit
	First to study the properties of the Helix (three-dimensional space curve, esp. re biology and genetics)	Antoine de Laloubère, French Jesuit
	Inventor of the Reflecting Telescope (use of curved mirrors allowing for study of large diameter objects)	Nicholas Zucchi, Italian Jesuit
	First to measure the rate of Acceleration of a Freely Falling Body	Giambattista Riccioli, Italian Jesuit
	Father of Egyptology / Father of Motion Pictures / Discovered Microbes	Athanasius Kircher, German Jesuit
	Pioneer of Neurophysiology (study of the nervous system, esp. re brain function)	Edme Mariotte, French Benedictine
	Father of Geology	Blessed Niels Steno, Danish Jesuit
	The Father of Aeronautics / Conceived idea for Braille	Francesco Lanza de Terzi, Italian Jesuit
	Designed the first ever Self-Propelled Vehicle	Ferdinand Verbiest, Belgium Jesuit
	Inventor of the Binocular Telescope (using both eyes simultaneously, i.e. binoculars)	Cherubin d'Orleans, French Capuchin Franciscan
	Theorist of the Camera Obscura (precursor to photography)	Johann Zahn, German Norbertine
	Inventor of the Photometer (instrument determining temperature, distance, age of celestial bodies)	François-Marie de Paris, French Capuchin Franciscan
	Inventor of Champagne	Perignon of Hautvilliers-on-the-Marne, French Benedictine
	Founder of the First Geographic Society	Vincenzo Coronelli, Italian Conventual Franciscan
	Father of Modern Pedagogy	John Baptist de la Salle, Canon of Reims, France
	Inventor of the first Electric Motor	Andrew Gordon, Scottish Benedictine
	Creator of the Lightning Rod (independent of Benjamin Franklin)	Prokop Diviš, Czech Norbertine
	Inventor of the Electroscope (instrument measuring an electrical charge)	Jean-Antoine Nollet, French Diocesan
	Noted for pioneering the study of Binary Stars (an orbiting star system)	Christian Mayer, Czech Jesuit
	Father of Modern Atomic Theory	Ruer Josip Bošković, Croatian Jesuit
	Probably the first Ecologist (studying relation of organisms to each other and their surroundings)	François Louis Receveur, French Conventual Franciscan
	Pioneer of Sign Language for the Deaf	Charles Michel de l'Épée, French Diocesan
	First astronomer to compute the orbit of Uranus	Placidus Frixmillner, Austrian Benedictine
	First to perform In Vitro Fertilization and Artificial Insemination / Discovered Echolocation (biological sonar)	Lazzaro Spallanzani, Italian Diocesan
	Father of Crystallography (determining the arrangement of atoms in solids)	René Just Haüy, French Diocesan
	Extensive work in cataloguing stars	Giuseppe Piazzi, Italian Theatine
	Inventor of the Zamboni Pile (an early dry battery)	Giuseppe Zamboni, Italian Diocesan
	Inventor of the Horizontal Pendulum (i.e. a compass, seismograph, etc.)	Lorenz Hengler, German Diocesan
	Inventor of the Induction Coil (electrical transformer, i.e. engine ignitions, etc.)	Nicholas Callan, Irish Diocesan
	Conceived idea for laying a Transatlantic Cable	John Mullock, Irish-Canadian Observant Franciscan
	Pioneering inventors of the Internal Combustion Engine	Eugenio Barsanti, Italian Piarist, +1864 and Giovanni Antonelli, Italian Diocesan
	Father of Astrophysics and Pioneer of Spectroscopic Astronomy (identifying properties of celestial bodies w/ spectrum)	Angelo Secchi, Italian Jesuit
	Father of Handwriting Analysis	Jean Hippolyte Michon, French Diocesan
	Father of Genetics	Gregor Mendel, Austrian Augustinian
	First to conceive of Seismic Radiancy (measure of advance electrical disturbance allowing prediction of earthquakes)	Alessandro Serpieri, Italian Scolopians
	Inventor of the Modern Refrigerator	Marcel Audiffren, French Cistercian, + after 1895
	Father of the Dynamo (electric generator) and Electric Motor	Stephen Ányos Jedlik, Slovakian Benedictine
	One of the founders of the Naturopathic Medicine Movement (holistic medical system focusing on natural remedies)	Sebastian Kneipp, German Diocesan
	Founder of the science of Cytology (study of cells)	Jean Baptiste Carnoy, Belgian Diocesan
	One of the earliest inventors of the Fountain Pen	Candide of Magland, French Capuchin Franciscan, + after 1903
	Inventor of the Bulletproof Vest	Casimir Zeglen, Ukrainian-American Resurrectionist, + after 1905
	Discovered Parthenogenesis (asexual reproduction) / Father of Modern Apiculture (bee keeping)	Johann Dzierzon, Polish Diocesan
	Inventor of the Mercalli Scale (instrument measuring intensity of earthquakes. Later improved by C. Richter)	Giuseppe Mercalli, Italian Diocesan
	Discovered Six Galaxies	George Mary Searle, American Paulist
	Noted for spectroscopic studies of Solar Prominences and Sun Spots	Gyula Fényi, Hungarian Jesuit
	First public demonstration of a Radio Broadcast (June 3, 1900. Preceding Marconi)	Roberto Landell de Moura, Brazilian Diocesan
	Greatly contributed to Wireless Telegraphy (helping to develop Mobile Communications)	Józef Murgaš, Slovakian-American Diocesan
	Noted for advancing studies of Cuneiform and Babylonian Astronomy	Franz Xaver Kugler, German Jesuit
	Inventor of the Track Circuit/Block System (device detecting obstructions on railroad tracks)	Angelo Fiorini, Italian Capuchin Franciscan
	Inventor of the Barocyclometer (a ship's device that determines existence and distance of storms at sea)	José María Algué, Spanish Diocesan
	Creator of the Seismic Network (partnership of towns, cities, countries in earthquake monitoring)	Frederick Louis Odenbach, American Jesuit
	Developed "Cullen Numbers" (a natural number sequence in mathematical theory)	James Cullen, Irish Jesuit
	Inventor of Synthetic Rubber	Julius Nieuwland, American Congregation of Holy Cross
	Pioneer of Radiometeorology (use of radar to determine weather)	Guido Alfani, Italian Piarist
	Among first to detect Excess Atmospheric Radiation (study of atmospheric remote sensing, i.e. greenhouse effect)	Theodor Wulf, German Jesuit
	Paleontologist who shared in the discovery of Peking Man	Teihard de Chardin, French Jesuit
	One of the most prolific researchers of Seismology, Geophysics and Meteorology of all time	James B. Macelwane, American Jesuit
	Pioneer in modern Psychology and Neurophysiology	Agostino Gemelli, Italian Observant Franciscan
	Pioneer in controlling the bacillus of Leprosy	Hilary Ross, American Daughter of Charity, + after 1960
	Co-Founder of Alcoholics Anonymous (with Bob Smith and Bill Wilson)	Ignatia Gavin, American Sister of Charity of St. Augustine
	Developed concept of an Expanding Universe ("Big Bang Theory") and Black Holes	Georges Lemaitre, Belgian Diocesan
	Extensive research in Asteroid Orbit Calculations	Otto Kippes, German Diocesan
	Pioneered infrared spectrograph (supporting double helix configuration of DNA)	Miriam Stimson, American Dominican, +1994
		Nicholas Oresme, George M. Searle, +2002



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NB: Because scientific research in the 20th and 21st centuries has become more collective in nature, fewer individuals stand out in any particular field.