

Story #1:

The Greatest Technological Breakthroughs of All Time

Thank God! Let's thank God for food! Thank God for our homes! Thank God for our clothing! And thank God for so much more.

We are so wealthy today compared with the conditions experienced throughout most of world history. This year, the poorest nations in the world will average an annual household income of \$4,000, and the worldwide per-household income will average around \$10,000.

Seven hundred years ago, the average English household income was \$1,176 per year (adjusted for inflation). By AD 1600, households had taken a pay raise, topping \$1,714 per year. However, the average income by AD 2000 was \$37,500 (adjusted for inflation). For almost 5,800 years of world history, people barely survived. Imagine trying to live on \$100 per month! And that would have included everything—food, clothing, shelter, tools, and animals.

Think about it. This year, the United States has produced 16 billion bushels of corn. That's 2,400 pounds for every man, woman, and child in America. Chickens produced 112 billion eggs, amounting to 340 eggs for every man, woman, and child in the country. And the cows of America produced 25 billion gallons of milk—enough for 74 gallons for every man, woman, and child. Yet farmers make up only 1.4% of the nation's workforce.

Let us remember that all this food comes from God. People who live in the city may suppose these things come from the grocery store. But farmers will tell you differently. In truth, all of this comes from God—the cows, the chickens, the grass, and the water that grows the grass.

But how did economies improve such that we are earning thirty times the money that people did in the 1600s and 1700s?

The answer is simple: God's goodness. The means God used to achieve these economic breakthroughs came by way of mostly Christian inventors in the Western world. Creative ideas produced labor saving devices that resulted in more division of labor, especially in the 19th and 20th centuries.

But first, it was Christian inventions that solved the problem of mass starvations arising because of limited agricultural outputs and inefficient farming techniques. The heavy iron plow, complete with the coulter and moldboard for turning the soil, was first mentioned in AD 643 in northern Italy. Wheels were added, and eight pair of oxen were employed for large plow jobs.

A Christian theologian and monk, Theophilus, was the first to publish an invention of the flywheel. The first eyeglasses appeared in a Dominican monastery in 1306. Of the 117 most "essential" inventions of all time, 91% are attributed to Western Christian nations.

Now, some inventions are more revolutionary than others because they free men and women from extreme drudgery—by orders of magnitude. In Western history, two inventions meet these criteria—both delivered by Christians.

The first of these landmark inventions appears in AD 1589 in the form of the first knitting machine for the production of cloth or clothing. A Protestant pastor, William Lee, takes credit for this breakthrough. The backstory of the invention is given by 19th century historian Gravenor Henson: "This gentleman [Rev. Lee], it is said, paid his addresses to a young woman in his neighbourhood, to whom, from some cause, his attentions were not agreeable; or, as with more probability it has been conjectured, she affected to treat him with negligence, to ascertain

her power over his affections. Whenever he paid his visits, she always took care to be busily employed in knitting, and would pay no attention to his addresses.”

As the legend goes, Lee invented the knitting machine so his true love would have more time for his visits. This invention revolutionized the industry, changing the production of cloth forever.

Another English inventor, John Kay (1704-1779), added the “flying shuttle,” once more paving the way to a quick weave—something the world had never seen in 5,700 years. Then James Hargreaves added his genius to the process by producing the “spinning jenny” in 1770 for manufacturing yarn. Initially, the machine was built to produce eight spools of yarn at a time—increasing quickly to 120. Following William Lee’s genius discovery, additional improvements vastly accelerated the process of making cloth.

Cyrus McCormick, a devoted Christian of the Presbyterian tradition, invented the world’s first automated “reaper” in 1831 at only twenty-two years of age. This mechanical device was pulled by horses. Sometimes forgotten, the reaper was a multi-generational vision in the making. Cyrus’ father had worked for twenty-eight years on various iterations of the automated reaper, but it was the son who finally achieved a workable design. By the year of his death, McCormick had sold 500,000 reapers, producing the most important advancement in agriculture since the development of the plow 1,500 years earlier. Men had been hand-cutting hay for 5,800 years of world history—until this Christian invention came along. The first mechanical reaper could do the work of twelve men, saving the farmer tremendous time and expense. Subsequently, thousands of iterations of improvement on McCormick’s technology have produced modern combines which can reap 150-200 acres per day. Few inventions have enabled such efficiency and division of labor for the developing world. In the words of his biographer, “No other man so truly represented the dawn of the industrial era. [McCormick’s reaper] made all other progress possible, by removing the fear of famine and the drudgery of farm labor.”

A devout Christian, Cyrus McCormick’s favorite Bible passage was Paul’s doxology in Romans 8:31-36. The inventor would confess his complete dependence on the Lord in his work: “If it were not for the fact that Providence has seemed to assist me in our business, it has at times seemed that I would almost sink under the weight of responsibility hanging upon me; but I believe the Lord will help us out.” The inventor was raised on the Westminster Shorter Catechism and regular teaching of the Bible, and he was completely convinced of the doctrine of the absolute sovereignty of God.

These are the inventions that made the most difference in the worldwide economy. Without improved efficiencies in the production of food and clothing, we would all still be earning \$1,700 per year and barely getting by.

O the depth of the riches both of the wisdom and knowledge of God! How unsearchable are his judgments, and his ways past finding out! For who hath known the mind of the Lord? or who hath been his counsellor? Or who hath first given to him, and it shall be recompensed unto him again? For of him, and through him, and to him, are all things: to whom be glory for ever. Amen. (Romans 11:33-36)

The “whole story” of these marvelous inventions and their inventors is available in my book, *Epoch: The Rise and Fall of The West*. Get a copy for your family this Christmas at www.generations.org/store

Story #2: The Greatest Medical Breakthroughs of All Time

*Bless the Lord, O my soul;
And all that is within me, bless His holy name!
Bless the Lord, O my soul,
And forget not all His benefits:
Who forgives all your iniquities,
Who heals all your diseases,
Who redeems your life from destruction,
Who crowns you with lovingkindness and tender mercies,
Who satisfies your mouth with good things,
So that your youth is renewed like the eagle's. (Psalm 103:1-5)*

As we celebrate Thanksgiving this year, we look around us and see hospitals, medical clinics, medical equipment, and medical treatments—none of which existed like this in AD 1700. Where did all this modern medicine come from? How did life expectancy improve so much for most people in most countries around the world in the year AD 2021?

Incredibly, every one of the seven or eight most important, lifesaving medical breakthroughs in history came by way of Christian doctors and scientists. It was God's goodness that brought such advancements in modern medicine. These inventions have saved billions of lives the world over.

Several years ago, I interviewed the inventor of the MRI machine, Raymond Damadian, on my daily radio program. I asked him about the secret to scientific breakthroughs similar to the one he had achieved in 1973. He said that two things are essential to these breakthroughs. First, the inventor must understand everything about the science and the technology thus far developed. But secondly, Raymond said the inventor needs a flash of brilliance, an inspirational conceptual breakthrough that can only come from God—by His providential mercies working upon the mind of the human creator.

Just as Raymond realized, the followers of Jesus Christ have been a tremendous blessing to the whole world—especially those who pursued the medical field in the 19th and 20th centuries. Would it surprise you to learn that Jesus Christ would bless the entire world with these insights? Medical breakthroughs that would bless billions of people the world over?

Let's look at a few high points in medical history. Christian doctors Joseph Lister (1827-1912) and Ignaz Semmelweis (1818-1865), with Louis Pasteur (1822-1895), identified germs as a root cause for disease and institutionalized practices of cleanliness and sterilization essential to modern medicine. Pasteur is well known for his commitment to a Christian faith and his critique of the growing anti-supernatural skepticism of the day. He commented, "Posterity will one day laugh at the foolishness of modern materialistic philosophers. The more I study nature, the more I stand amazed at the work of the Creator. I pray while I am engaged at my work in the laboratory."

What may have been the most useful discovery in the twentieth century once again is due to another Christian researcher, Alexander Fleming (1881-1955). His discovery came about accidentally, when he forgot to clean a petri dish in his laboratory. He returned two weeks later to find a mold growing, but he discovered that the staphylococcus bacteria in the dish was prevented from multiplying. Later the scientist commented on his discovery: "One sometimes finds what one is not looking for. When I woke up just after dawn on Sept. 28, 1928, I certainly didn't plan to revolutionize all medicine by discovering the world's first antibiotic, or bacteria killer. But I guess that was exactly what I did."

Fleming was not ashamed to testify of his Christian faith in the most explicit language possible: “My greatest discovery was that I needed God, and that I was nothing without him, and that he loved me and showed his love by sending Jesus to save me.” Reviewing the statistical breakdown of the causes for American deaths in 1910, it turns out that 20% of annual deaths were due to diseases that could have been cured by antibiotics. In the US alone, these treatments saved about 45 million lives over seventy-five years. Applying the same rates for the rest of the world, Alexander Fleming’s discovery would have saved over 1 billion lives. No other medical discovery in Western history comes close to such contributions. At the turn of the 21st century, the prestigious British Medical Journal conducted a survey of its professional reading base on “the greatest medical advance since 1840.” Quite appropriately, clean water and sewage disposal topped the list, “followed closely by the discovery of antibiotics.”

Another of the most important discoveries in medical science of the last two centuries was again the contribution of a Christian doctor in Toronto, Canada. Raised in Maine, Dr. Charles Best stumbled onto the use of insulin while testing diabetic dogs in 1922. An active member of St. Andrews Presbyterian Church in Toronto, the doctor was called upon in church to read the Scriptures regularly, and his son Henry reported that his father’s favorite hymns were “The Old Rugged Cross” and “Abide with Me.” In an interview with the British Medical Association conducted in 1959, Dr. Best clearly acknowledged the Creator. Best’s work on insulin has saved at least 200 million lives worldwide.

A comprehensive survey of the most significant medical discoveries would be incomplete without the application of anesthesia to medical surgeries. James Young Simpson (1811-1870) takes his place in history as the first physician to use anesthesia for a patient in 1847. A devout Christian, this doctor also testified to his faith in an extended essay entitled “My Substitute”:

“I saw myself a sinner standing on the brink of ruin, deserving nought but hell. For one sin? No, for many, many sins committed against the unchanging laws of God. But again, I looked and saw Jesus, my Substitute, scourged in my stead, and dying on the cross for me. I looked, and wept, and was forgiven. And it seemed to me to be my duty to tell you of that Saviour, to see if you will not also ‘look and live.’”

As he lay on his deathbed, Simpson continued to affirm his faith in Christ to the very end. “I have mixed a great deal with men of all shades of opinion. I have heard men of science and philosophy raise doubts and objections to the gospel of Christ, but I have never for one moment had a doubt myself.”

Upon his death, a crowd of 100,000 people lined the streets of Edinburgh to honor the man who first introduced anesthesia for patients subject to invasive medical treatments.

On November 8th, 1895, German physics professor Wilhelm Conrad Roentgen made a remarkable discovery. In a laboratory below his living quarters, the scientist noticed something very strange happening. He had taken a tube similar to fluorescent light bulbs, removed all the air, and filled the tube with a special gas. As he activated the tube, he noticed a greenish ray reflect on a distant crystal. Holding a book, a playing card, and a block of lead against the ray, he observed the density of the ray on the screen changing. Then he noticed something quite strange—the image of the bones of his fingers holding the lead piece were reflected on the screen. He called the image an X-ray, for the unknown variable used in algebra.

In true form to the Christian method of science, Roentgen later explained the basis of his success in scientific inquiry. “I did not think; I investigated,” he said.

Roentgen was awarded the first Nobel prize for physics for this extraordinary contribution to science and medicine. In another recent survey conducted by the Science Museum of London, the invention of the X-ray was voted the most important modern scientific discovery.

Raised in the Evangelical Church of the Netherlands where his grandfather had served as an elder, Roentgen

continued in the faith through his professional life. On Sunday afternoons, the scientist would read the Bible aloud to his wife, Bertha, and his Bible reading only increased in later years. “Roentgen was a believing Protestant, convinced of an absolutely ordered existence of all things. Creation was not a haphazard or accidental occurrence but a magnificent process of precise orderliness.”

After the discovery of X-ray imaging, MRI imaging would have to be the next most important discovery in modern medical science. On July 3, 1977, an evangelical Christian scientist named Raymond Damadian completed his first MRI scan of a human heart and lung. In his college years, Damadian testifies how he was turned away from his parents’ evangelical faith by what he called the “atheism of evolution.” However, he confessed that “through faith in Jesus alone, my soul was gloriously rescued by God.” He attributed his discovery in magnetic resonance to “the unfolding of God’s plan for my life.” The scientist went on to say that all creation originates “in an eternal God and Creator of us all. And He has graciously seen fit to share much of His truth with us. But He has also allowed mankind to stumble upon that truth or to systematically uncover it through experimentation and experience. Apart from His willingness to share it, we would know virtually nothing at all.”

Damadian was refused the Nobel Prize for his discovery, at least partially because he was (in his words), a “scientific heretic, . . . refusing to pay homage to Darwin and his misguided theory of origins,” holding rather to the “literal six-day creation” account contained in Scripture. Over half a billion MRI scans are performed each decade, saving tens of millions of lives.

Without exception, every substantial leap forward in modern medicine came by committed Christians in Western nations. These were God-fearing, humble, practical, experimental men, scientists who relied on God for special insight. This short survey offers irrefutable proof that Christ has indeed blessed the entire world in the field of medical science. Thank God!

The “whole story” of these marvelous inventions and their inventors is available in my book, *Epoch: The Rise and Fall of The West*. Get a copy for your family this Christmas at www.generations.org/store

Story #3:

The Greatest Breakthroughs in Civil Liberty in World History

Let's thank God for our liberties this Thanksgiving!

In many ways, the United States of America became the exemplar or pinnacle of Christian liberties after a long-fought battle through the centuries. Setting aside the rise of Marxism over the last hundred years, let's consider the tremendous blessings we have enjoyed (and still enjoy) since the Pilgrims founded that first colony in 1620. November 19, 2021 will be remembered as a singularly important moment in American history. It was the day an eighteen-year-old young man, Kyle Rittenhouse, was exonerated by jury trial, and the right of self-defense was upheld in the United States of America. While the decision met with the displeasure of the most powerful voices in the country, the trial by jury is held sacrosanct. The foundations of political liberty in this country are still in place. That has not always been the case with other nations of the world.

In the research I did for my book *Preparing the World for Jesus*, I have to say that I wasn't quite ready for the horrifying journey down the dark corridors of a world without Christ. Nightmarish is the only word to describe such a world. We cannot possibly comprehend the demonic strongholds and the autocratic tyranny that held sway over the peoples in the West, the East, and among the more primitive tribes before the coming of Jesus Christ.

The history of the Roman Empire is one long account of murder, treachery, wicked intrigue, bloody pogroms, and revolutions. Politicians were unbridled autocrats. Caligula murdered his mother and brothers. Nero murdered two wives, his mother, and his stepbrother. A paranoid and autocratic Domitian murdered senators, knights, and other officials by the hundreds. He introduced exquisite forms of torture, and nobody was safe from his informants and police state tactics. There is nothing to see here that might commend the classical world, its ethics, or governments.

The story of liberty is epochal in itself and goes on from roughly AD 600 to AD 1776, when fifty-six men placed their names on the dotted line of our Declaration of Independence. This story, which played out over one thousand years, is the most engaging and the most intense, harrowing, heart-stopping drama ever told.

As Christ, King of kings and the author of all liberties, would have it, King Alfred (849-899) was one of the first to champion the heritage of law and liberty. Alfred's last words to his son record his commitment to self-government and opposition to all forms of oppression and tyranny:

"One can be no right ruling king under Christ himself unless he have learning, know the law, and understand the use of his writs, and be able by his own reading to inform himself how according to law to govern his land. My days are almost done. We must now part. I shall to another world, and thou shalt be left alone in all my wealth. I pray thee, strive to be a father and a lord to thy people. Be thou the orphan's father and the widow's friend. Comfort thou the poor, and shelter the weak; and with all thy might, right that which is wrong. And son, govern thyself by law; then shall the Lord love thee, and God above all things shall be thy reward. Call thou upon him to advise thee in all thy need, and so shall he help thee, the better to compass that which thou wouldst."

In the measured words of biographer Sir John Spelman, King Alfred established for Englishmen "a fit and a reasonable liberty" by subjecting himself to the rule of law "and by subjecting [the people] only to the equitable trial of a known and certain law." Alfred paved the way for English liberties, referring to himself as a "sovereign of a free people."

Thank God for the Magna Carta!

Not long after Alfred, lawless monarchs caused a setback to English liberties. The sexual exploits of the Plantagenets, and King John in particular, are notorious even by modern standards. Reports of John having violated wives and daughters of barons were common. He attempted a rape of Baron Robert Fitzwalter's daughter. This man

became one of John's most ardent enemies. It is one thing for a king to confiscate a man's property and material belongings, but should he go after a man's wife or daughter, he invites a war that will never end. Fitzwalter would champion the cause of the Magna Carta and lead the armies of the barons against the king.

John had inherited one of the largest and wealthiest kingdoms in Europe. However, he couldn't hold it because his immorality was only exceeded by his incompetence. If a man's success in governance is measured by the increase of his own net worth, John did well. He doubled his personal holdings between 1204 and 1215. By the time of the publication of the Magna Carta, he had amassed a total of fifty castles, palaces, houses, and hunting lodges. His extravagant lifestyle required hundreds of assistants, bakers, butlers, cooks, carters, chamber clerks, chambermaids, footmen, scullions, grooms, and knights. This whole entourage traveled with him as he moved from castle to castle.

By 1205, the situation in England had reached a crisis. Winston Churchill summed up the conditions: "By systematic abuse of his feudal prerogatives, John drove the baronage to violent resistance." In the fall of 1214, the nobles held a meeting in which they issued certain demands, which they called a Charter of Privileges, to the king. The king agreed to meet on his own home turf (in London), and the nobles showed up armed to the teeth on January 8th, 1215. This time they asked John to confirm the Charter of Privileges outlined by Henry I over a hundred years earlier, to which they had added a few of their own demands. The Magna Carta was slowly taking shape. John requested a delay until Easter, though at this point no one trusted him or his word. By Easter week, the opposition had assembled a respectable army consisting of 2,000 knights, forty barons, and five earls. On May 5th, 1215, the barons formally renounced their fealty to John, although they had already secretly agreed to this action in November 1214 in a meeting with Archbishop Stephen Langton.

On June 15th, 1215, the parties assembled twenty miles to the east of London at a large meadow called Runnymede—the birthplace of Western liberties, an eight-hundred-year stop gap to the ever-pressing demands of the tyrannical state. Seldom before had the world seen such a declaration of liberties as this—a written constitution that would bind the force of the tyrant. Here was a line in the sand, a written compact or covenant to which kings and rulers would be bound for generations.

As a staunch opponent to political liberties for centuries, the papacy soundly condemned the Magna Carta as "not only shameful and base, but also illegal and unjust." The English nobles forthrightly ignored the pope and pledged their lives to secure the freedoms contained in the charter. Arguably the linchpin for the success of the Magna Carta, Archbishop Stephen Langton lent full support to its passage. Enraged, Pope Innocent III suspended him from ecclesiastical functions, and Langton was exiled for three years. But it was too late now to reverse the course of liberty.

By God's grace, the opponents to liberty—both king and pope—were dead by the following year. And the nobles continued to hold the monarchy to the charter and the rights contained in it. By 1217, the document was well-established in the realm. Between 1215 and 1315, it would be amended and reissued thirty-eight times. Magna Carta introduced the concept of the first representative government in England, freedom for the church, rights of inheritance, limitation on monarchical taxation, legal rights in court proceedings, and restoration of lands and liberties unjustly taken from the Welsh. Perhaps the most important part of the document (certainly for men like Kyle Rittenhouse) is found in these words:

"No free man shall be seized or imprisoned, or stripped of his rights or possessions, or outlawed or exiled, or deprived of his standing in any other way, nor will we proceed with force against him, or send others to do so, except by the lawful judgment of his equals or by the law of the land. To no one will we sell, to no one deny or delay right or justice."

Throughout the Christian era, from Alfred (875) to William Bradford (1620), nations carved out liberties for their people by acknowledging God and His law. Covenants were agreed upon, under God and in submission to His law. The Magna Carta (1215) came "at the prompting of God." The Swiss Pact of Brunnen (1315) is

prefaced, “In the Name of God, Amen.” The Scottish Declaration of Arbroath (1315) submits its case to “the Supreme and Judge.” The English Pilgrims also prefaced the Mayflower Compact (1620) with “In the Name of God, Amen.” The Dutch Declaration of Independence (1581) underscores the point that the monarchy is “constituted by God.” All liberties or rights come from God—not man, and not the people. Liberty is established by God’s law, as communicated in the Bible. This is the fundamental principle of liberty.

Thank God for the Bill of Rights

What many do not know is that the US Constitution almost lost the Bill of Rights (the first Ten Amendments) at the beginning. Thanks be to God for the stalwart work of Patrick Henry of Virginia and Samuel Adams of Massachusetts for pressing hard for this basic statement of rights before ratification of the US Constitution! Returning to Richmond in 1788 (after a retirement from politics), Patrick Henry served as the most dominant and influential member of the Virginia Assembly. During the constitutional debate, Henry spoke more than any other delegate. Read these critical words upon which hinges so much of our liberty in this country to this very day:

“If you give up these powers [to the states], without a bill of rights, you will exhibit the most absurd thing to mankind that ever the world saw—government that has abandoned all its powers—the powers of direct taxation, the sword, and the purse. You have disposed of them to Congress, without a bill of rights—without check, limitation, or control. You have a bill of rights to defend you against the state government, which is bereaved of all power, and yet you have none against Congress, though in full and exclusive possession of all power! You arm yourselves against the weak and defenseless, and expose yourselves naked to the armed and powerful. Is not this a conduct of unexampled absurdity? What barriers have you to oppose to this most strong, energetic government? To that government you have nothing to oppose. All your defense is given up. This is a real, actual defect. It must strike the mind of every gentleman.”

Patrick Henry’s motion requiring a bill of rights prior to ratification in the Virginia Assembly lost to a vote of 80–88. However, Randolph’s slightly modified motion was carried. Randolph used softer language but still underscored the need for stated rights. Subsequently, the Convention formed a committee to suggest a list of amendments of rights to Congress. Just before the Convention convened, Patrick Henry had drafted his own list, the basics of which the committee incorporated in its final proposal.

There may be some question about the faith of America’s founding fathers, but there can be no question concerning Patrick Henry’s Christian faith. Unlike the deists of his day, he was unabashed in his profession of faith in Christ. Writing to his sister Anne upon the loss of her husband, Henry wrote, “O may we meet in heaven, to which the merits of Jesus will carry those who love and serve him.” In the final portion of his will, Patrick Henry included this highly significant message to his children: “I have now disposed of all my property to my family. There is one thing more I wish I could give them, and that is the Christian religion.” Henry’s bedside doctor, the deist Dr. Cabell, heard Henry’s dying words and considered them a testimony of his faith in Christ: “He prayed in clear words, a simple child-like prayer for his family, for his country, and for his own soul in the presence of death. Speaking great words of love to his family, he told them that he was thankful for the goodness of God.” Most of the U.S. Constitution has not proved useful in holding back the ever-expanding grasp of the federal government. However, the one-page Bill of Rights has proven invaluable for freedom. It has protected liberty in many court battles through the centuries. It has provided a restraint to many a tyrant who would have persecuted innocent citizens and created a terrifying police state of this nation.

My friends, thank God for your freedoms this Thanksgiving. Thank God we are not living in a communist state! Thank God we have not left our children in prison camps and gulags! Thank God for the light of liberty that has dawned upon this dark world. Such liberty can only come from the light of Jesus Christ.

Read the full story of this fascinating history in *Epoch: the Rise and Fall of the West*. An extended version may be found in *The Story of Freedom*—which, by the way, would make fun Christmas presents this year if you’re looking for the best stories in “His Story” to share with your family. Visit www.generations.org/store for more details.