What Hath God wrought! is from the Book of Numbers—the 4th book of the Old Testament:

Surely there is no enchantment (sorcery) against Jacob, neither is there any divination against Israel: according to this time it shall be said of Jacob and of Israel, What hath God wrought! (Numbers 23:23).

Here is the dictionary definition of the word WROUGHT:

A past tense and a past participle of work.

adjective
1. Put together; created: a carefully wrought plan.
2. Shaped by hammering with tools. Used chiefly of metals or metalwork.
3. Made delicately or elaborately.

This short phrase from the Book of Numbers were the first words transmitted by the newly invented marvel of the electric telegraph.

Telegraph comes from the Greek tele (far) and grapho (write) and was first used by French inventor Claude Chappe to mean FAR WRITER.

In 1844, time and distance were annihilated by the electric telegraph—the marvelous invention of Professor Samuel Morse. This miraculous invention later led to the telephone, radio, TV . . . and eventually the Internet!

On May 24, 1844, Professor Samuel Morse sent the first message via electricity from Washington City to Baltimore.

It comprised the short Biblical phrase: What Hath God Wrought!

This was the most revolutionary invention since the printing press and the dawn of the telecommunications era.

Professor Morse first envisioned the electric telegraph in 1832

In 1832, Samuel Morse—the American Leonardo da Vinci— was returning to the U.S. from a trip to Europe. Morse was a very talented PAINTER and went abroad to study sculpture and painting in Great Britain, France, and Italy.

On the return voyage aboard the packet ship Sully, the conversation turned to the new discovered wonders of electro-magnetism:

In the early part of the voyage conversation at the dinner table turned upon recent discoveries in electro-magnetism, and the experiments of Ampère with the electro-magnet. Dr. Jackson spoke of the length of wire in the coil of a magnet, and the question was asked by some one of the company, "If the velocity of electricity was retarded by the length of the wire?" Dr. Jackson replied that electricity passes instantaneously over any known length of wire. He referred to experiments made by Dr. Franklin with several miles of wire in circuit, to ascertain the velocity of electricity; the result being that he could observe no difference of time between the touch at one extremity and the spark at the other. At this point Mr. Morse interposed the remark, "If the presence of electricity can be made visible in any part of the circuit, I see no reason why intelligence may not be transmitted instantaneously by electricity." The conversation went on. But the one new idea had taken complete possession of the mind of Mr. Morse. It was as sudden and pervading as if he had received at that moment an electric shock. All that he had learned in former years, the experiments he had seen in his boyhood, his studies with Professors Day and Stillman, the later and significant discourses of Professor Dana, and conversations with Professor Renwick, were revived, and began to form themselves into means and ways to the accomplishment of a grand result.

withdrew from the table and went upon deck. He was in mid-ocean, undique caedum, undique pontus. As the lightning cometh out of the east and shineth unto the west, so swift and far was the instrument to fork that was taking shape in his creative mind. (Prime, The Life of Samuel F. B. Morse, pp. 251-252).

Immediately after the ship's arrival in New York, Morse was eager to make his vision of the electric telegraph a practical reality:

Upon the Sully's arrival in New York in the autumn of 1832, Morse disembarked eager to begin work upon the telegraph; but the necessity of supporting himself and his children left little time for experiment and still less money for engaging in the construction of instruments. Furthermore, since there were no manufacturers of electrical appliances, the work had to be slowly and laboriously done by hand.

In 1835 Morse had the good fortune to secure an appointment as professor of the Literature of the Arts of Design in the new University of the City of New York, and took up his lodgings in the University building on Washington Square. Utilizing these quarters, not only as a studio and living apartment, but also as a workshop, he succeeded before the close of 1836 in completing his first, crude telegraph apparatus, and in devising a numerical code to represent the letters of the alphabet. (Thompson, Wiring a Continent, pp. 8-9).

For the next 5 years, working almost alone, and with very limited funds, Samuel Morse developed a rudimentary telegraph and then solved the greatest problem of all: transmission of electricity over long distances.

A battery that supplied a steady source of electric current had just been invented by Italian inventor Alessandro Volta. Volta's battery produced DIRECT CURRENT which is notoriously weak at long distances.

By 1837, Professor Morse had solved the 3 main problems for transmitting information via electricity:

1. A transmitter.
2. A receiver.
3. A relay to amplify the voltage over long distances.

DC current loses a lot of its potential over long distances. Morse's relay reinforced this voltage with fresh batteries at each station.

The ingenuity of Morse's invention was its SIMPLICITY….As writing should contain no unnecessary words so a mechanical device should contain no unnecessary parts….The telegraph answered to that description and was sublime in its simplicity of operation.

Morse offered to sell his telegraph patent to the U.S. government for $100,000

After the successful test in 1844, Morse offered to sell his patent to the U.S. government for the measly sum of $100,000. That is equivalent to about $500,000 in today's paper "money."

Morse saw the telegraph as a natural adjunct to the Post Office.

Congress had to vote on any measure to appropriate funds for the telegraph, and with the opposition of Johnson, the government sponsored telegraph was doomed:

The Telegraph, no longer an experiment, was an accomplished fact. Speaking for itself, it required no champions on the floor of Congress, or in the public press. The extension of the line from Baltimore to Philadelphia and New York, and to all the cities of the land, was only a work of time. But the aid of Congress was sought in vain. An appropriation of $8,000 was made to support the line between the capital and Baltimore, while in its infancy, but further than that the Government declined to go. The sum named as the price for which the Morse Company would sell the Telegraph to the Government, was $100,000. The subject was discussed in the report of Hon. Cave Johnson, the Postmaster General, under President Polk. He was a member of Congress when the bill was before the House appropriating $30,000 for the experimental line, and was one of those who ridiculed the whole subject as unworthy the notice of sensible men. As Postmaster-General he said in his report, after the experiment had succeeded to the admiration of mankind: "That the operation of the Telegraph between Washington and Baltimore had not satisfied him that, under any rate of postage that could be adopted, its revenues could be made equal to its expenditures." (Prime, The Life of Samuel F. B. Morse, pp. 510-511).

With government support withdrawn, the telegraph was left entirely in the hands of private enterprise. After years of fierce competition, a company named Western Union emerged as the leading telegraph company in the U.S.

Morse aroused the hatred of Rome for his anti-Papal writings!!

With the success of the telegraph, Morse should have been a very wealthy man and able to return to his first love—painting....That was not to be however because Morse had aroused the hatred of the Roman hierarchy for his anti-Papal writings.

That was the real reason for the rejection of his miraculous invention!!

In 1830, during his European trip, while watching a procession of the host in Rome, he failed to take off his hat as a sign of respect to "Jesus" carried in the monstrance. According to the dogma of transubstantiation, the host is miraculously transformed into the body and blood of Christ and must be rendered divine honors. Morse failed to do this . . . and therefore lost his hat:

Later, on this same day, while watching a part of the ceremonies on the Corso, he has this rather disagreeable experience: -

"I was standing close to the side of the house when, in an instant, without the slightest notice, my hat was struck off to the distance of several yards by a soldier, or rather a poltroon in a soldier's costume, and this courteous maneuver was performed with his gun and bayonet, accompanied with curses and taunts and the expression of a demon in his countenance.

"In cases like this there is no redress. The soldier receives his orders to see that all hats are off in this religion of force, and the manner is left to his discretion. If he is a brute, as was the case in this instance, he may strike it off; or, as in some other instances, if the soldier be a gentleman, he may ask to have it taken off. There was no excuse for this outrage on all decency, to which every foreigner is liable and which is not of infrequent occurrence. The blame lies after all, not so much with the pitiful wretch who perpetrates this outrage, as it does with those who gave him such base and indiscriminate orders." (Edward Lind Morse, Samuel F. B. Morse: His Life & Journals, vol. I, p. 353).

After this experience at Rome, his eyes were really opened to the true nature of the Latin Church. When he arrived home, the Latin hierarchy was very active in subverting the nation through immigration and seeking taxpayer money for their parochial schools. As a Christian and a patriot, Morse decided to join the fight to save the public schools . . . and the nation!

In 1835, Morse published 2 small books which won him the undying hatred of the Roman hierarchy:

1. Imminent Dangers to the Free Institutions of the United States through Foreign Immigration.

2. Foreign Conspiracy Against the Liberties of the United States.
In between warning his fellow citizens about the threat from Rome, Professor Morse found time to invent the telegraph—the greatest boon to civilization since the printing press.

**The first transatlantic cable was laid in 1858**

Government support or not, nothing could halt the march of progress. By 1855, telegraph lines covered most of the eastern United States and the most ambitious plan of all was a transatlantic cable linking the United States with Great Britain.

Morse worked with another great Christian patriot named Cyrus W. Field to make the transatlantic cable a success.

Cyrus W. Field was another great Christian patriot like Professor Morse.

He was the driving force behind laying the transatlantic cable.

The first cable soon stopped working and this allowed the Jesuits to almost start a war over the Trent Affair.

Cyrus W. Field worked with his British counterparts to lay the first transatlantic cable. The USS Niagara and HMS Agamemnon laid the cable in the ocean. Messages of mutual admiration for the great feat were exchanged between Queen Victoria and President Buchanan.

The telegraph was seen as God's instrument to promote peace and goodwill between nations.

Telegrams expressing a desire for peace and fraternal relations between the two countries were sent between Queen Victoria and President Buchanan.

On August 16, the first message sent across the cable was, "Glory to God in the highest; on earth, peace and good will toward men." Then Queen Victoria sent a telegram of congratulation to President James Buchanan through the line, and expressed a hope that it would prove an additional link between the nations whose friendship is founded on their common interest and reciprocal esteem:

**THE QUEEN'S MESSAGE**

To the President of the United States, Washington:-
The Queen desires to congratulate the President upon the successful completion of this great international work, in which the Queen has taken the deepest interest.

The Queen is convinced that the President will join with her fervently hoping that the electric cable which now connects Great Britain with the United States will prove an additional link between the nations, whose friendship is founded upon their common interest and reciprocal esteem.

The Queen has much pleasure in thus communicating with the President, and renewing to him her wishes for the prosperity of the United States.

President Buchanan responded that it was a triumph more glorious, because far more useful to mankind, than was ever won by conqueror on the field of battle:

**THE PRESIDENT'S REPLY**

Washington City, August 16, 1858.

To Her Majesty Victoria, The Queen of Great Britain:-
The President cordially reciprocates the congratulations of her Majesty the Queen, on the success of the great international enterprise accomplished by the science, skill and indomitable energy of the two countries.
National hysteria broke out in the United States and England at the completion of the laying of the cable:

The celebrations that followed bordered on hysteria. There were hundreds of gun salutes in Boston and New York: flags flew from public buildings, church bells rang. There were fireworks, parades, and special church services. Torch-bearing revelers in New York got so carried away that City Hall was accidentally set on fire and narrowly escaped destruction. (Standage, *The Victorian Internet*, p. 81).

Unfortunately the transatlantic line broke after 3 weeks, and this interruption in communications almost led to a war between Great Britain and the U.S. over the Trent Affair.

**President Lincoln used the telegraph to save the Union!!**

God’s great gift of this new technology came just in time to save the Union…President Lincoln used the telegraph to reach out to his generals in the field and the vast Union armies communicated frequently by telegraph.

Until now, very little is known about President Lincoln’s use of this revolutionary new technology.

Except for the White House, the President spent most of his time in the telegraph office.

Major Thomas Eckert was head of the Military Telegraph Corps.

A special branch of the army was organized called the Military Telegraph Corps with major Thomas T. Eckert commanding in Washington City.

Thousands of miles of telegraph lines were laid by the Military Telegraph Corps thus enabling the Union army to conduct far-flung campaigns over the vast rebel held territory.

Here is a quote from a book by David Homer Bates, manager of the war department telegraph office:

Abraham Lincoln has been studied from almost every point of view, but it is a notable fact that none of his biographers has ever seriously considered that branch of the Government service with which Lincoln was in daily personal touch for four years—the military telegraph; for during the Civil War the President spent more of his waking hours in the War Department telegraph office than in any other place, except the White House. While in the telegraph office he was comparatively free from official cares, and therefore more apt to disclose his natural traits and dispositions than elsewhere under other conditions. (Bates, *Lincoln in the Telegraph Office*, p. 3).
Unlike many of his subordinates, Lincoln was quick to grasp the new technology of the telegraph. His top priority was a telegraph linking the 2 greatest nations on earth.

**President Lincoln was most anxious to establish communications with the Czar of Russia!!**

President Lincoln was most anxious to establish a close diplomatic relationship with the great Czar of Russia—Alexander II....In 1861, the Czar sent his fleet to New York and San Francisco and thereby forestalled British military help to the Confederacy.

In his Annual Message to Congress, December, 1863, Lincoln, after referring to the arrangements with the Czar of Russia for the construction of a line of telegraph from our Pacific coast through the empire of Russia to connect with European systems, urged upon Congress favorable consideration of the subject of an international telegraph (cable) across the Atlantic and a cable connection between Washington and our forts and ports along the Atlantic coast and the Gulf of Mexico. In the latter scheme he took a deep personal interest, and he had a number of conferences with Cyrus W. Field, the chief exponent of ocean cables. (Bates, Lincoln in the Telegraph Office, p. 257).

By 1861, the telegraph line had reached the Pacific Ocean and Western Union was given the mammoth task of extending it to Russian Alaska.

Czar Alexander II helped save the Union by threatening intervention if Great Britain or France joined the CONFederates.

Russia was the ONLY friend the U.S. had during the Civil War.

President Lincoln was most anxious to extend the telegraph line to the great Czar of Russia.

By 1861, the telegraph line had reached the Pacific Ocean and Western Union was given the mammoth task of extending it to Russian Alaska.

On July 1, 1864, President Abraham Lincoln granted Western Union the right of way from San Francisco to the British Columbia border.

The proposed route was from San Francisco to New Westminster, BC, and then across Russian Alaska to the Bering Strait and then across Siberia to Moscow.

President Lincoln's assassination ended the noble enterprise of linking the 2 greatest nations on earth!

Wiring the world through Russia.

Route of the proposed cable between Washington and Moscow.

President's Lincoln's assassination ended the Russian-American telegraph line. The excuse for ending the project was that the transatlantic cable made the Russian cable obsolete.

There was no direct communication line between Washington and Moscow until 1963.

Direct communication between the 2 greatest nations on earth would have prevented WWI, the Bolshevik Revolution, WWII, the Cold War etc., etc.

**The Supreme Court ruled that Morse was the sole inventor of the telegraph!!**

After the government refused to buy the telegraph patent, Morse had to turn to private enterprise. Fierce competition emerged among different companies over control of his invention.

Morse was frequently charged with plagiarism and he finally had to defend his invention all the way to the U.S. Supreme Court.

Because the government refused to buy his patent,
Here is an excerpt from the Morse patent trial before the Supreme Court:

The opinion of Justice Grier, concurred in by Justices Nelson and Wayne, contained these additional points
"I entirely concur with the majority of the court that the appellee and complainant below, Samuel F. B. Morse, is the true and first inventor of the recording telegraph, and the first who has successfully applied the agent or element of Nature, called electro-magnetism, to printing and recording intelligible characters at a distance; and that his patent of 1840, finally reissued in 1848, and his patent for his improvements, as reissued in the same year, are good and valid; and that the appellants have infringed the rights secured to the patentee by both his patents. But, as I do not concur in the views of the majority of the court, in regard to two great points of the case, I shall proceed to express my own." (Prime, The Life of Samuel F. B. Morse, p. 578).

Honors poured in upon Morse from around the world as all nations adopted the Morse code for communications. Prussia was one of the first nations to adopt it, and they put it to good effect with the defeat of the Austrians in 1866:

After passing a few months on the Isle of Wight, the Professor and family went to Dresden for the winter of 1867. Three months were spent in that delightful city. His presentation, at the court of the King of Saxony was a compliment paid to his distinguished services.
From Dresden, Professor Morse repaired to Berlin, where he was specially honored by those who were the best qualified to appreciate the magnitude and importance of his work. From Mr. Bancroft, the United States Minister, and members of the Prussian Government, he received constant attentions. He remained but a few days in Berlin, and was obliged to decline a presentation at court which was tendered him. (Prime, The Life of Samuel F. B. Morse, p. 703).

The Prussians again used the telegraph . . . and the train . . . to achieve a lightning victory over the French in 1870 . . . which finally led to the liberation of Rome on September 20, 1870.

At the age of 56, Morse finally bought a home beside the Hudson River, in Poughkeepsie, NY.
He lived there until he went to his eternal home on April 2, 1872.
The body of the “Lightning Man” awaits the great Resurrection morning in Greenlawn Cemetery, Brooklyn, NY.

Samuel Morse is the real father of modern telecommunications because his invention led to the telephone, radio, TV . . . and eventually the Internet!

Nikola Tesla completed the electrical revolution begun by Professor Morse!!

Professor Morse saw by experiments that DC current lost at lot of its potential when covering long distances. This is now proven mathematically by Ohm's Law.

This voltage loss led to his invention of the relay or repeater which reinforced the voltage with a battery at every station.

Tesla's discovery of the rotating magnetic field was almost as revolutionary as the Morse telegraph.
Morse envisioned the electric telegraph during an ocean voyage from Europe to the United States. Tesla saw the rotating magnetic field during a walk in the park in Budapest, Hungary.

Morse had his patent stolen and had to defend his invention against frequent infringements. Most of Tesla's great inventions were stolen and he ended up a virtual pauper when he died.

After his previous lab was burned to the ground, Tesla set up shop at 48 Houston St., in lower Manhattan.

This was just a few blocks from NYU where the telegraph was invented.

Professor Morse invented the telegraph at NYU.

Tesla's Houston St. lab was just a few block from NYU.

Tesla's inventions are just too many to list...He completed the electrical revolution begun by the great Christian patriot, Samuel F. B. Morse.

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Vital Links

- [Nikola Tesla—The Man Who Electrified The World!!](#)
- [Life and Times of President Lincoln](#)
- [The Jesuits in Russia](#)

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References


Morse, Samuel. *Imminent Dangers to the Free Institutions of the United States through Foreign Immigration*. E. B. Clayton, New York, 1835.


