Jot & Tittle

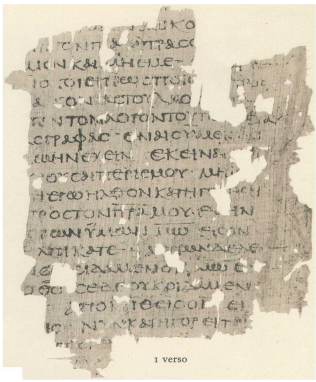
No.182

A personal selection of Wessex, British Isles and world history.

"By the rivers of Babylon, There we sat down, Yeah, we wept, When we remembered Zion" Boney M. 1978

This month, in J&T 182, we take a look at some fascinating details on two diverse subjects. The first topic is the word of God, literally. What do we know of its origins and how has it been passed down to us. The second topic is a deep dive into the life of Victorian England's legendary hoticulturalist and gardener Joseph Paxton. Enjoy.

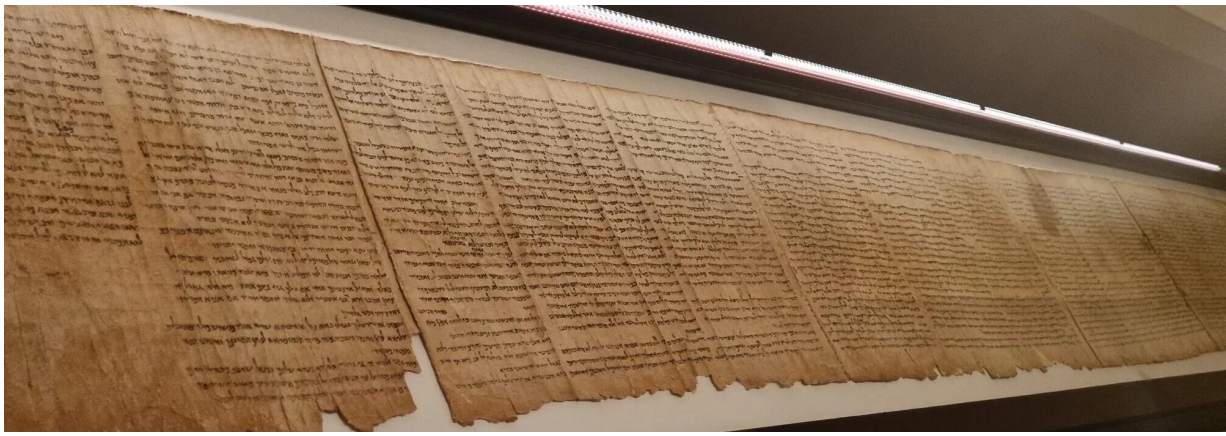
BIBLICAL THOUGHTS[1]



In a previous edition I tried to get to the bottom of who had written the Bible. Alas it was a very complex story, especially with the Old Testament which is really ancient Hebrew scriptures. Not only were there numerous scribes but at various times the books were reorganised and other works added or redacted. There are many references in the Old Testament to a whole corpus of other works which have since been lost or not thought to be canonical enough for inclusion. The books too are not in date order – for example the Paradise of Genesis, a Greek translation of the Hebrew 'garden', is now believed by the majority of scholars to have been written after the Babylonian Captivity (586 – 537 BCE).

It was the Hebrews siding with the Egyptians that incurred the wrath of Nebuchadnezzar II (605 – 562 BCE) and resulted in the destruction of the Temple in Jerusalem and the transportation of the Jews to Babylon. Some brave souls managed to salvage a few sacred texts from the Temple Library but most were lost. It seems that this traumatic event permanently altered the Jewish religion (and those that followed). No longer could prayers, sacrifices and ceremonies be based on the Temple but instead became portable, with God residing in the heart of each worshipper. Observation of morality had replaced ceremonial performance.

An interesting aspect of studying Biblical origins is the many wonderful manuscripts that have survived. Below, are some of the *Dead Sea Scrolls* found in a cave at Qumran between 1946 and 1956.



They date from the third century BC to the 1st century CE. The 15,000 scrolls and fragments are displayed in the Israel Museum in Jerusalem. They are the oldest surviving manuscripts of entire Biblical books.

- The Greek text at the top of the page is known as the *Egerton Gospel* and is a second century codex in the British Museum. A codex is a manuscript in book form. It parallels stories found in the four gospels but also includes other passages. In Public Domain.
- The picture on the left is the *Golden Canon Tables*, a gold stained Byzantine illuminated Gospel Book (in the form of a concordance that allows you to compare the gospels) now in the British Library. It has been trimmed and bound with a letter from Eusebius, Bishop of Caesarea (260 – 339AD) who was known as the *Father of Church History*. In the Public Domain.

EDITORS
Mark Brandon
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Above is a 4th century Greek Biblical manuscript[3] in the British Library and known as the *Codex Sinaiticus* and contains the oldest copy of the entire New Testament as well as the earliest and best witness for some of the books of the Old Testament. The German Biblical scholar (and manuscript hunter) Constantin von Tischendorf discovered the Codex Sinaiticus in 1844 in St Catherine's Monastery at the foot of Mount Sinai.

Left is Folio 27r from the *Lindisfarne Gospels* containing the incipit (here begins) from the Gospel of Matthew in the Jerome translation and now in the British Library. Probably written and illustrated by Eadfrith, Bishop of Lindisfarne (698 – 721 CE). A wonderful example of Anglo-Saxon abstracted decoration. Lindisfarne is also known as Holy Island and lies off the Northumbrian Coast.

THE ULTIMATE GARDENER

Simon Seligman is a cultural lecturer and life coach, and works part-time for John Ruskin's arts charity, the Guild of St George. For 19 years he worked at Chatsworth in Derbyshire, where he came to know the place, its people, its collections and its landscape intimately. He toured the United States lecturing with his then-employer, Deborah (Debo Mitford) Cavendish, Duchess of Devonshire. The article below is taken from his work for the Arts Society. Photos are courtesy of Chatsworth.

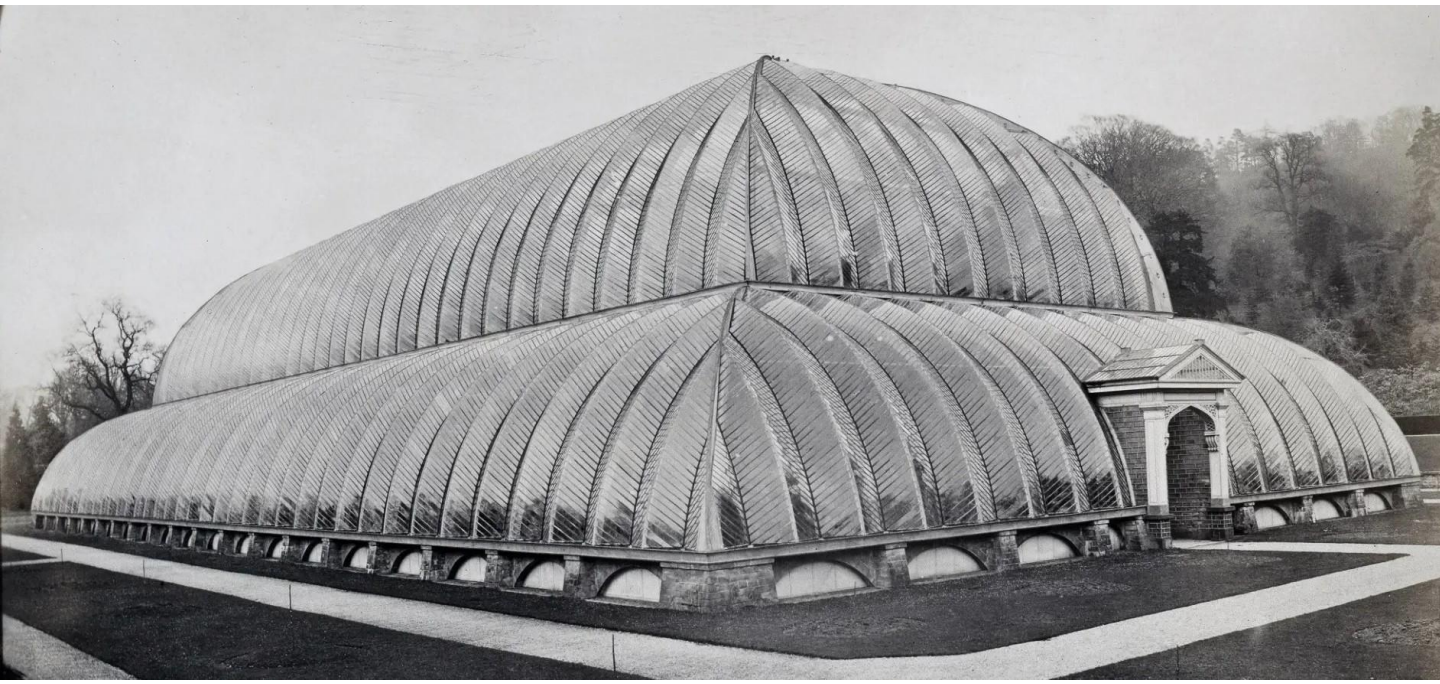
Born into a humble farming family, Joseph Paxton (1803–65) built himself a career that encompassed gardening, architecture, engineering and politics. At the age of 23 he was hired by William Cavendish, 6th Duke of Devonshire, to be head gardener at Chatsworth, a country estate in the Derbyshire Dales. Here is Paxton's account of his arrival: *I left London by the Comet coach for Chesterfield, arrived at Chatsworth at half past four in the morning on… the ninth of May 1826. As no person was to be seen at that early hour, I got over the greenhouse gate… explored the pleasure grounds and looked around the outside of the house. I then went down to the kitchen gardens, scaled the outside wall, and saw the whole of the place, set the men to work there at 6 o'clock; then returned to Chatsworth, and got Thomas Wheldon to play me the water works, and afterwards went to breakfast with poor dear Mrs Gregory [the Duke of Devonshire's housekeeper] and her niece. The latter fell in love with me, and I with her, and thus completed my first morning's work at Chatsworth before nine o'clock.*

This description gives a sense of the energy and boldness that was to have a transformative impact on British horticulture, architecture and much more. His patron's wealth, enthusiasm and trust gave Paxton everything he needed to flourish. From this, and with an unlimited budget to experiment and learn, grew a career of global significance.

The duke often found himself astonished by his employee's achievements. In 1843 Tsar Nicholas I of Russia advised that he would visit Chatsworth the following year. The duke set Paxton the task of constructing the world's largest fountain in time for his visit. Paxton had an eight-acre lake dug to supply a gravity-fed water feature they named the Emperor Fountain. The resulting jet of water reached 90 metres – almost twice the height of Nelson's Column. After witnessing it for the first time, the duke wrote: '*It is a glorious success. The most imaginative object and a new glory of Chatsworth. O Paxton!*'

Paxton's wife, Sarah Bown, should also be acknowledged in this story of success. Archival research has shown that Paxton owed much to her support. Sarah was Joseph's match in strength of character, which was just as well; in 1842 the poet Leigh Hunt wrote that if Paxton had not met Sarah he would have 'devoured a young lady and five orchards every day for his luncheon'. For more than three decades, during which her husband was away more than he was home, Sarah was his eyes and ears at Chatsworth, with considerable executive responsibilities that were never formalised or remunerated. Sometimes begrudgingly – but with impressive diligence – Sarah carried out the orders of her husband and their patron for many years.

Today Paxton is perhaps best remembered for his pioneering glasshouses. His early years at Chatsworth were spent constructing greenhouses of every description: mushroom houses, a strawberry house, a pine house, a melon and cucumber house, a peach house and vine ranges, among others. He used a ridge-and-furrow system for his glass roofs, in which panes were set at right angles to the morning and evening sun to maximise heat and light. Paxton also devised integrated gutters and drainage within his sash bars, using hollow supports to carry rainwater away – innovations that helped make his glasshouses both efficient and elegant.



These refinements stood Paxton in good stead when he came to design the Great Conservatory, a vast horticultural showpiece in the heart of the duke's pleasure grounds, built between 1836 and 1840. Paxton worked with the architect Decimus Burton, a glasshouse innovator with far greater formal training than Paxton, to realise his vision. At the time of its completion, it was the largest glasshouse in England, measuring 84 metres long, 37 metres wide and 19 metres high. It was glazed with some 25,000 sheets of glass, while its sash bars totalled 40 miles in length. Seven miles of hot-water pipes ran beneath, and hidden tunnels were constructed to transport the 300 tonnes of coal needed each year to feed the underground boilers. Inside, exotic palms, ferns and other plants flourished in climate zones arranged according to geographic origin. During World War I, however, shortages of coal and labour meant temperatures could no longer be maintained. It fell into dereliction and was demolished in 1920.

The duke had a passion common among the wealthy during the 19th century: collecting rare plants from across the empire and beyond. Paxton was able to procure a staggering variety of specimens. These included the giant Victoria amazonica waterlily – its leaves large enough for a child to sit on – which he was the first in England to bring into flower, and the dwarf banana, which Paxton named Musa cavendishii in tribute to his patron. The banana plant was a novelty in 1830s Britain. Paxton was one of the first to make it flower and fruit on these shores, winning a medal at the Royal Horticultural Society's show in 1835 for his efforts. He later supplied plants to Samoa, after storms had destroyed its crop; from that initial stock, the Cavendish banana grew to become the dominant strain grown commercially worldwide today. It is still grown in the Display House at Chatsworth.

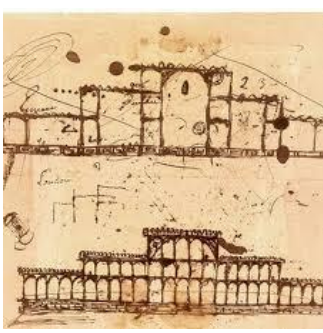
Not everything Paxton turned his hand to was a success. In 1837 he planned a botanical trip to Kolkata, where Chatsworth's gardeners were to collect plants to bring back to Derbyshire. Above all he sought Amherstia nobilis: a heavy-flowering tree (left, also known as The Pride of Burma[3]) *unequalled in the flora of the East Indies, and perhaps not surpassed in magnificence and elegance in any part of the world*, as the duke put it. Paxton duly brought back an Amherstia, which survived the ocean crossing in a Wardian case (a sealed terrarium). An Amherstia House was built at Chatsworth exclusively to support its growth, but in a rare failure Paxton was never able to make the tree flower.

At Chatsworth, Paxton became adept at manipulating rocks, water and built structures to combine drama and beauty for his patron. Carriage drives and paths would wend their way artfully though the garden and woodland, with marvels carefully positioned to delight the visitor; everyone from Queen Victoria to Charles Darwin came to admire them. As Paxton's reputation grew, he began working beyond the Duke of Devonshire's estates. He took on projects as diverse as building a mansion for the Rothschild family; editing several magazines and founding a newspaper, hiring Charles Dickens as its editor; and designing an ambitious railway system. Public parks are another area in which he made considerable impact.

In the 1840s Paxton was invited to design Prince's Park in Liverpool, followed by the much larger Birkenhead Park in the Wirral. He employed his signature approach: serpentine drives paired with winding walks, bodies of water and rockworks. An instinctive political liberal who believed that gardens improved everyone's lives, he saw no reason why the general public should not enjoy the same pleasures as his aristocratic patrons.

Birkenhead Park profoundly influenced the American landscape architect Frederick Law Olmsted, who later laid out what is perhaps the most famous designed landscape in the United States: Central Park in New York. After visiting, Olmsted wrote that *in democratic America there is nothing to be thought of as comparable with this People's Garden*, adding: *The poorest British peasant is as free to enjoy it as the Queen*. Today Birkenhead Park is the only Grade I listed landscape in England that was intended from the outset to be accessible to all. It is celebrated as a landmark in the history of public parks.

The Great Exhibition of the Works of Industry of All Nations, held in Hyde Park in 1851, was the first international exhibition of its kind. It was intended to house 14,000 exhibitors, attract millions of visitors and present Britain as the pre-eminent industrial power of the age. Paxton devised a radical proposal for a glass building, three times the size of St Paul's Cathedral, in which to house the Exhibition. Paxton's first sketch (on blotting paper) is shown right. The idea was based on the Lily House at Chatsworth and inspired in part by the ribbed leaf structure of waterlilies. His design was competing against proposals by more than 240 architects and engineers, including Isambard Kingdom Brunel.



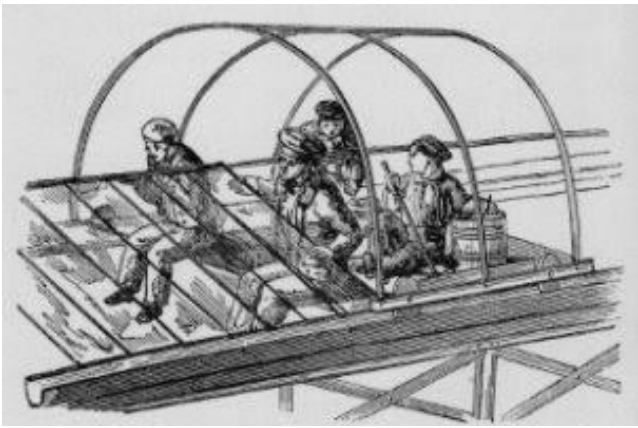
Paxton had a genius for professional friendship and collaboration. One morning Brunel appeared on Paxton's doorstep with a note listing the height of all the large trees on site. Alongside the measurements he had written: *I mean to try and win with our plan, but I have thought it right to give your beautiful plan all the advantages it is susceptible of.* In its modest way, has there ever been a more honourable tribute from one great visionary to another?

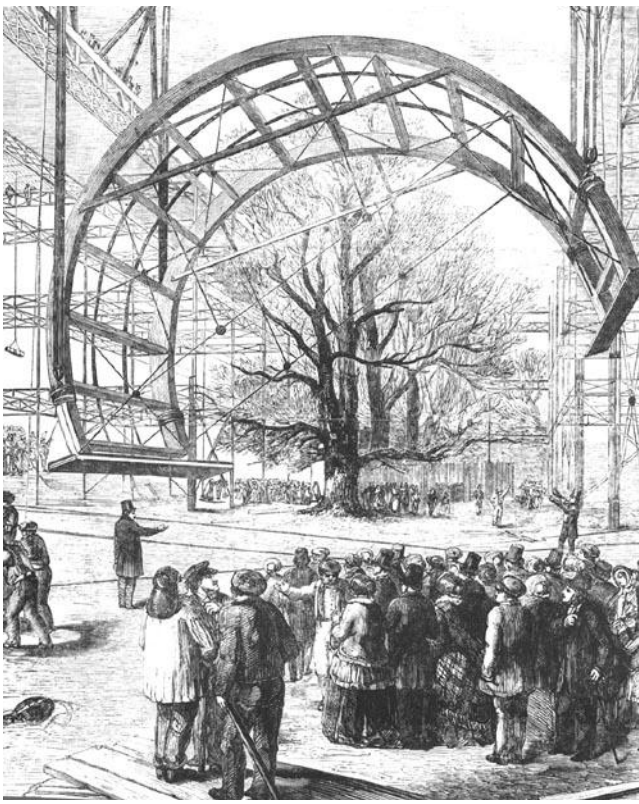
Paxton's first design was flat-roofed, leaving an open court where three mature elms stood. It was suggested that perhaps a central barrel-vaulted transept could be raised to encompass the trees, and it was this amended design that was ultimately chosen and built. Paxton solved a problem that scores of architects could not: how to erect the largest building in the world as a temporary structure capable of hosting vast crowds – more than six million visitors – safely, on budget and in less than a year.

The genius of Victorian low-tech is shown in it's construction. Right, one of sixteen arch sections being lifted into place. They were made of laminated timber and they were all hoisted into place inside a week.

Right, is one of the glazing wagons, covered with tarpaulin in bad weather, which laid 300,000 of the largest glass panels then ever made. It took less than 100 days to glaze the exhibition's 990,000 square feet.

After the exhibition closed, the Crystal Palace was relocated to Sydenham, to the area that now bears its name. Though the building burnt down in 1936, its legacy endures. Architect Norman Foster has said of the building: *The Crystal Palace was the birth of modern architecture, of pre-fabrication, of soaring spans of transparency… That was truly a seminal building.*





1. With thanks to *Bible Manuscripts* by McKendrick and Doyle (The British Library 2007).
2. Codex Sinaiticus courtesy of Encyclopedia Britannica.
3. *Pride of Burma* courtesy of Vintage Green Farms with Tom Piergrossi. Paxton's sketch courtesy of West Midland's History. The construction image from the Illustrated London News of 1850 shown Courtesy of Alex Churchill's History Stack. Engraving by George Measom (1818-1901) of glazing wagon. In the Public Domain.